

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) A compound corresponding to the structure (I A), (I B) or (II)



wherein

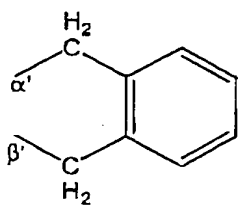
Page 2

wherein exactly one of the radicals R^1 and R^2 is H, or wherein one of the radicals R^1 and R^2 is aryl and the other radical of R^1 and R^2 is H or C_{1-12} -alkyl,

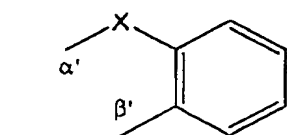
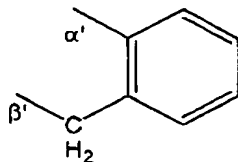
R^3 and R^4 are selected from the group consisting of H, C_{1-12} -alkyl, C_{3-8} -cycloalkyl, $-CH_2-C_{3-8}$ -cycloalkyl, aryl or $-(C_{1-6}$ -alkyl)-aryl, wherein at least one of the radicals R^3 and R^4 is H,

or

one of the radicals R^1 and R^2 together with one of the radicals R^3 and R^4 form W, where W is $\alpha'-(CH_2)_n-\beta'$ where $n = 3, 4, 5$ or 6 , $\alpha'-CH=CH-CH_2-\beta'$, $\alpha'-CH_2-CH=CH-\beta'$, $\alpha'-CH=CH-CH_2-CH_2-\beta'$, $\alpha'-CH_2-CH=CH-CH_2-\beta'$, $\alpha'-CH_2-CH_2-CH=CH-\beta'$, or $\alpha'-O-(CH_2)_m-\beta'$ where $m = 2, 3, 4$ or 5 , or where W corresponds to

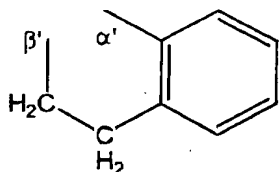


or

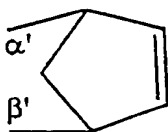


or

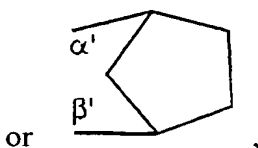
where $X = CH_2, O,$ or $S,$



or



or



or

where the end of W identified by α' is joined to the atom identified by α in the compound corresponding to structure (I A), (I B) or (II), the end of W identified by β' is joined to the atom identified by β in the compound corresponding to structure (I A), (I B) or (II), the other radical of R^1 and R^2 is H or C_{1-12} -alkyl, and the other radical of R^3 and R^4 is H or C_{1-12} -alkyl;

R^5 is C_{1-12} -alkyl, C_{3-8} -cycloalkyl, $-CH_2-C_{3-8}$ -cycloalkyl, aryl, $-(C_{1-6} \text{ alkyl})$ -aryl, heterocyclyl, $-(C_{1-6} \text{ alkyl})$ -heterocyclyl or $C(=O)R^{11}$;

R^6 is H, C_{1-8} -alkyl, $-CN$, fluorine, chlorine, bromine, iodine, NO_2 , NH_2 , NHR^{12} , $NR^{13}R^{14}$, OR^{15} , $S(O)_pR^{16}$ where $p = 0, 1$ or 2 , $-C(=O)R^{17}$ or $-N=N$ -aryl;

R^7 is H, C_{1-8} -alkyl, aryl, $-CN$, fluorine, chlorine, bromine, iodine, NO_2 , NH_2 , NHR^{12} , $NR^{13}R^{14}$, OR^{18} , $S(O)_qR^{19}$ where $q = 0, 1$ or 2 , or $C(=O)R^{20}$,

R^8 is H, C_{1-8} -alkyl or aryl,

or

R^7 and R^8 together form Y, wherein Y is $\gamma' - CR^{21} = CR^{22} - CR^{23} = CR^{24} - \delta'$, where the end of Y identified by γ' is joined to the atom identified by γ in the compound corresponding to structure (II), and where the end of Y identified by δ' is joined to the atom identified by δ in the compound corresponding to structure (II);

R^9 and R^{10} are independently selected from the group consisting of H, C_{1-8} -alkyl, C_{3-8} -cycloalkyl, $-CH_2-C_{3-8}$ -cycloalkyl, aryl and $-(C_{1-6}\text{-alkyl})$ -aryl;

R^{11} is H, C_{1-8} -alkyl, C_{3-8} -cycloalkyl, $-CH_2-C_{3-8}$ -cycloalkyl, aryl or OR^{25} ;

R^{12} is C_{1-6} -alkyl or $-CH_2$ -aryl;

R^{13} and R^{14} are identical or different C_{1-6} -alkyl radicals, or together are $-(CH_2)_h-$ and form a ring, where $h = 4$ or 5 ;

R^{15} and R^{16} are independently selected from the group consisting of H, C_{1-8} -alkyl, C_{3-8} -cycloalkyl, $-CH_2-C_{3-8}$ -cycloalkyl, aryl and $-(C_{1-6}$ -alkyl)-aryl;

R^{17} is H, C_{1-8} -alkyl, C_{3-8} -cycloalkyl, $-CH_2-C_{3-8}$ -cycloalkyl, aryl, $-(C_{1-6}$ -alkyl)-aryl, NH_2 , NHR^{12} , $NR^{13}R^{14}$ or OR^{26} ;

R^{18} and R^{19} are independently selected from the group consisting of H, C_{1-8} -alkyl, C_{3-8} -cycloalkyl, $-CH_2-C_{3-8}$ -cycloalkyl, aryl and $-(C_{1-6}$ -alkyl)-aryl;

R^{20} is H, C_{1-8} -alkyl, C_{3-8} -cycloalkyl, $-CH_2-C_{3-8}$ -cycloalkyl, aryl or $-(C_{1-6}$ -alkyl)-aryl or OR^{27} ;

R^{21} , R^{22} , R^{23} and R^{24} are independently selected from the group consisting of H, fluorine, chlorine, bromine, iodine and OR^{28} ;

R^{25} , R^{26} , R^{27} and R^{28} are independently selected from the group consisting of H and C_{1-6} -alkyl, where R^{25} is not H when both R^1 is aryl and R^2 is alkyl;

and wherein the compound is not

4,5,6,7-tetrahydro-2-methyl-5,7-diphenylpyrazolo-[1,5-a]pyrimidine,

4,5,6,7-tetrahydro-2,5-dimethyl-7-phenylpyrazolo-[1,5-a]pyrimidine,

4,5,6,7-tetrahydro-5,7-dimethyl-3-phenylpyrazolo-[1,5-a]pyrimidine,

4,5,6,7-tetrahydro-2,5,7-trimethylpyrazolo[1,5-a]pyrimidine,

4,5,6,7-tetrahydro-5,7-dimethyl-2-phenylpyrazolo-[1,5-a]pyrimidine,

4,5,6,7-tetrahydro-2-methyl-5,7-di-n-propylpyrazolo[1,5-a]pyrimidine-3-carbonitrile,

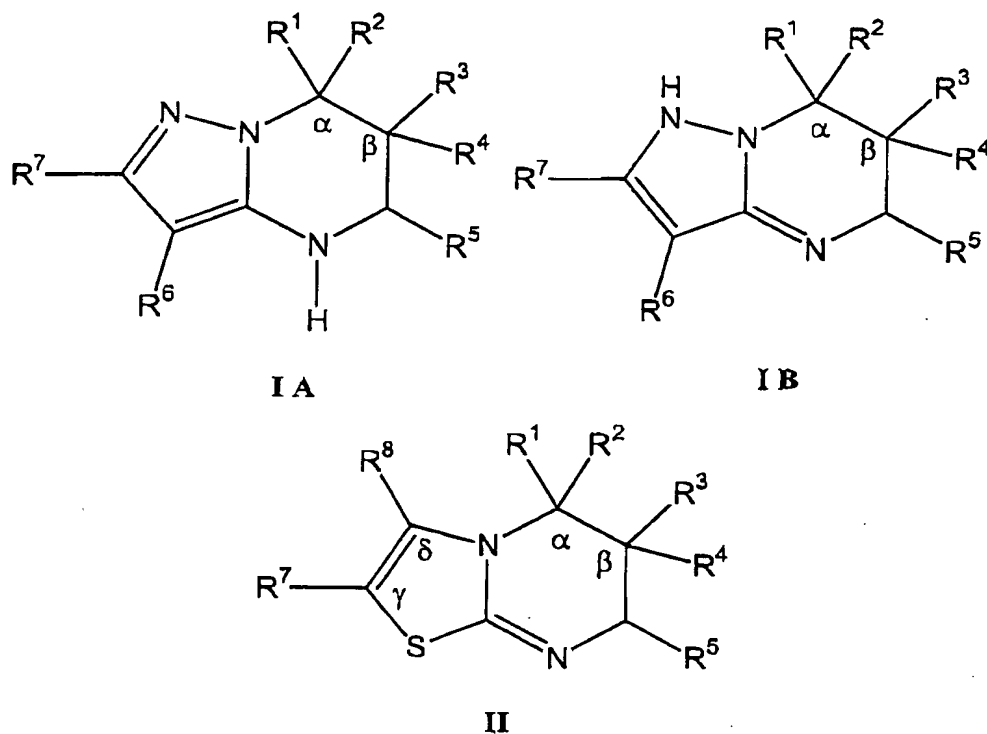
4,5,6,7-tetrahydro-5-methyl-7-[3-(trifluoro-methyl)-phenyl]pyrazolo[1,5-a]pyrimidine-3-carbonitrile,

7-[4-(chloro)-phenyl]-4,5,6,7-tetrahydro-5-methylpyrazolo[1,5-a]pyrimidine-3-carbonitrile, 7-[3-(chloro)-phenyl]-4,5,6,7-tetrahydro-5-methylpyrazolo[1,5-a]pyrimidine-3-carbonitrile,

3,4-dihydro-2-(4-nitrophenyl)-4-phenyl-2H-pyrimido[2,1-b]benzothiazole, or

3,4-dihydro-4-(4-methylphenyl)-2-(4-nitrophenyl)-2H-pyrimido[2,1-b]benzothiazole.

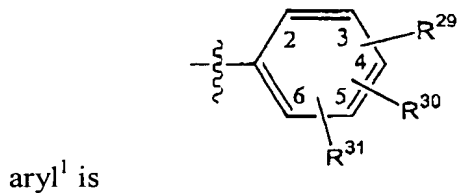
2. (original) A compound according to claim 1, wherein the compound is present as a physiologically compatible salt.
3. (original) A compound according to claim 1, wherein the compound is present as a pure enantiomer or a pure diastereomer.
4. (original) A compound according to claim 1, wherein the compound is present as a mixture of enantiomers or a mixture of stereoisomers.
5. (currently amended) A compound corresponding to the structure (I A), (I B) or (II)

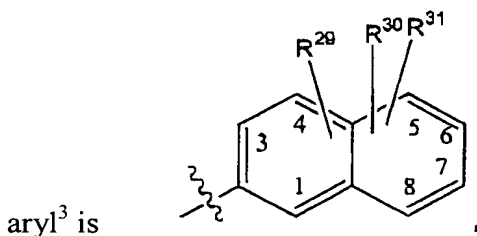
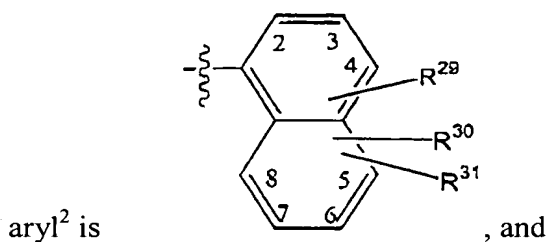


or a salt thereof, or a stereoisomer, mixture of stereoisomers having an arbitrary mixture ratio, or a racemic mixture thereof;

~~according to claim 1~~, wherein

R^1 and R^2 are independently selected from the group consisting of H, $O-R^9$, $S-R^{10}$, C_{1-6} -alkyl, aryl' or $-(C_{1-6}\text{-alkyl})\text{-aryl}'$, wherein aryl' is aryl¹, aryl², or aryl³,



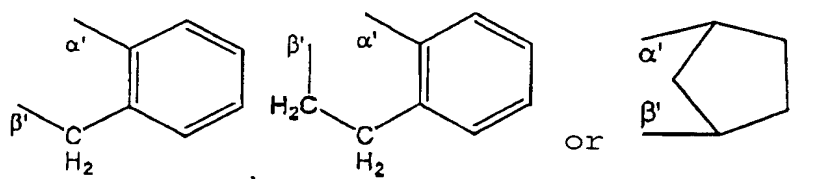


wherein exactly one of the radicals R¹ and R² is H, or wherein one of the radicals R¹ and R² is aryl' and the other radical of R¹ and R² is H or C₁₋₁₂-alkyl, and where R²⁹, R³⁰ and R³¹ are independently selected from the group consisting of H, C₁₋₆-alkyl, F, Cl, Br, I, OH, O-C₁₋₆-alkyl, O-aryl¹ and O-CH₂-aryl¹,

R³ and R⁴ are H, or unsubstituted, singly substituted or multiply substituted methyl, ethyl, n-propyl, 2-propyl, n-butyl, isobutyl, sec.-butyl, tert.-butyl, n-amyl, isoamyl, sec.-amyl, n-hexyl, isohexyl, sec.-hexyl, aryl' or -CH₂-aryl', where multiple substitution comprises replacement of multiple hydrogens bonded to one or more atoms by one or more substituents, and wherein at least one of the radicals R³ and R⁴ is H,

or

one of the radicals R¹ and R² together with one of the radicals R³ and R⁴ form W, where W is α'-CH=CH-CH₂-β', α'-CH=CH-CH₂-CH₂-β', or α'-O-(CH₂)_m-β' where m = 2, 3, 4 or 5, or where W corresponds to



where the end of W identified by α' is joined to the atom identified by α in the compound corresponding to structure (I A), (I B) or (II), the end of W identified by β' is joined to the atom identified by β in the compound corresponding to structure (I A), (I B) or (II), the other radical of R^1 and R^2 is H, methyl, ethyl, n-propyl, 2-propyl, n-butyl, isobutyl, sec.-butyl, tert.-butyl, n-amyl, isoamyl, sec.-amyl, n-hexyl, isohexyl or sec.-hexyl and the other radical of R^3 and R^4 is H, methyl, ethyl, n-propyl, 2-propyl, n-butyl, isobutyl, sec.-butyl, tert.-butyl, n-amyl, isoamyl, sec.-amyl, n-hexyl, isohexyl, or sec.-hexyl;

R^5 is unsubstituted, singly substituted, or multiply substituted methyl, ethyl, n-propyl, 2-propyl, n-butyl, isobutyl, sec.-butyl, tert.-butyl, n-amyl, isoamyl, sec.-amyl, n-hexyl, isohexyl, sec.-hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl or cycloheptyl, where multiple substitution comprises replacement of multiple hydrogens bonded to one or more atoms by one or more substituents, or R^5 is aryl', $-(\text{CH}_2)_k\text{-aryl}'$ where $k = 1, 2, 3$ or 4 , heterocyclyl, or $\text{C}(=\text{O})R^{11}$;

R^6 is H, methyl, ethyl, -CN, fluorine, chlorine, bromine, iodine, $-\text{C}(=\text{O})R^{17}$ or $-\text{N}=\text{N-aryl}^1$;

R^7 is H, aryl¹, OR^{18} , $\text{S}(\text{O})_q R^{19}$ where $q = 0, 1$ or 2 , or R^7 is unsubstituted, singly substituted, or multiply substituted methyl, ethyl, n-propyl, 2-propyl, n-butyl, isobutyl, sec.-butyl, tert.-butyl, n-amyl, isoamyl, sec.-amyl, n-hexyl, isohexyl or sec.-hexyl, where multiple substitution comprises replacement of multiple hydrogens bonded to one or more atoms by one or more substituents,

R^8 is H or aryl',

or

the radicals R^7 and R^8 together form Y, where Y is $\gamma' - CR^{21} = CR^{22} - CR^{23} = CR^{24} - \delta'$, where the end of Y identified by γ' is joined to the atom identified by γ in the compound corresponding to structure (II), and the end of Y identified by δ' is joined to the atom identified by δ in the compound corresponding to structure (II);

R^9 is unsubstituted, singly substituted or multiply substituted methyl, ethyl, n-propyl, 2-propyl, n-butyl, isobutyl, sec.-butyl, tert.-butyl, n-amyl, isoamyl, sec.-amyl, n-hexyl, isohexyl, sec.-hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl or cycloheptyl or is $-(CH_2)_r-O)_s-H$ where $r = 1, 2, 3, 4, 5$ or 6 and $s = 1, 2, 3, 4, 5$ or 6 , where multiple substitution comprises replacement of multiple hydrogens bonded to one or more atoms by one or more substituents;

R^{10} is aryl' ;

R^{11} is aryl' or OR^{25} ;

R^{17} is OR^{26} ;

R^{18} is H or methyl;

R^{19} is H, aryl¹, or unsubstituted, singly substituted or multiply substituted methyl, ethyl, n-propyl, 2-propyl, n-butyl, isobutyl, sec.-butyl, tert.-butyl, n-amyl, isoamyl, sec.-amyl, n-hexyl, isohexyl or sec.-hexyl, where multiple substitution comprises replacement of multiple hydrogens bonded to one or more atoms by one or more substituents;

R^{21} , R^{22} , R^{23} and R^{24} are independently selected from the group consisting of H, fluorine, chlorine, bromine, iodine and OR^{28} ;

R^{25} is H, methyl, ethyl, n-propyl, 2-propyl, n-butyl, isobutyl, sec.-butyl, tert.-butyl, n-amyl, isoamyl, sec.-amyl, n-hexyl, isohexyl or sec.-hexyl, where R^{25} is not H when both R^1 is aryl and R^2 is alkyl;

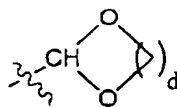
R^{26} is H, methyl, ethyl, n-propyl, 2-propyl, n-butyl, isobutyl, sec.-butyl, tert.-butyl, n-amyl, isoamyl, sec.-amyl, n-hexyl, isohexyl or sec.-hexyl;

R^{28} is H, methyl or ethyl;

Heterocyclyl is furan-2-yl, furan-3-yl, thien-2-yl, thien-3-yl, pyridin-2-yl, pyridin-3-yl or pyridin-4-yl, where furanyl, thienyl and pyridinyl are unsubstituted, singly substituted or multiply substituted, and where multiple substitution comprises replacement of multiple hydrogens bonded to one or more atoms by one or more substituents;

R^{29} , R^{30} and R^{31} , when occurring within R^3 , R^4 , R^5 , R^7 , R^8 , R^{10} , R^{11} , or R^{19} , are independently selected from the group consisting of H, C_{1-6} -alkyl, C_{3-8} -cycloalkyl, $(C_{1-6}$ alkyl)- C_{3-8} -cycloalkyl, aryl, $(C_{1-6}$ -alkyl)-aryl, heterocyclyl, $(C_{1-6}$ alkyl)-heterocyclyl, F, Cl, Br, I, -CN, -NC,

-OR³², -SR³³, -NO, -NO₂, NH₂, NHR³⁴, NR³⁵R³⁶, -N-OH, -N-OC₁₋₆-alkyl, -NHNH₂, -N=N-aryl, -(C=O)R³⁷, -(C=S)R³⁷, or



where $d = 1, 2$ or 3 , and may be in any arbitrary ring position;

R^{32} and R^{33} are independently selected from the group consisting of H, - C_{1-6} -alkyl, - C_{3-8} -cycloalkyl, $-(C_{1-6}$ -alkyl)- C_{3-8} -cycloalkyl, -aryl, $-(C_{1-6}$ -alkyl)-aryl,

-heterocyclyl, $-(C_{1-6}$ -alkyl)-heterocyclyl, $(C=O)R^{38}$, $-[(CH_2)_w-O]_z-H$ or $-[(CH_2)_w-O]_z-C_{1-6}$ -alkyl where $w = 1, 2, 3$ or 4 and $z = 1, 2, 3, 4$ or 5 ;

R^{34} is C_{1-6} -alkyl, -CH₂-aryl or -(C=O)O-tert.-butyl;

R^{35} and R^{36} are C_{1-6} -alkyl or together are $-(CH_2)_g-$ and form a ring where $g = 4$ or 5 ;

R^{37} is H, - C_{1-6} -alkyl, - C_{3-8} -cycloalkyl, $-(C_{1-6}$ -alkyl)- C_{3-8} -cycloalkyl, -aryl, $-(C_{1-6}$ -alkyl)-aryl, -heterocyclyl, $-(C_{1-6}$ -alkyl)-heterocyclyl, -OR³⁹, -NH₂, -NHR³⁴, -NR³⁵R³⁶;

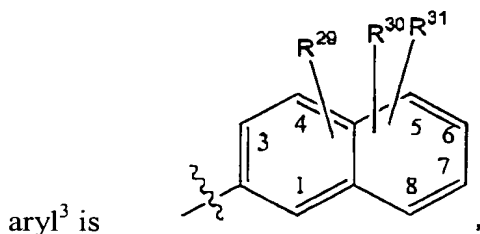
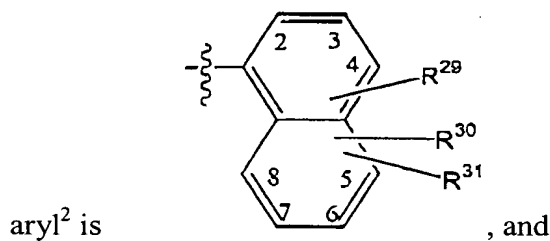
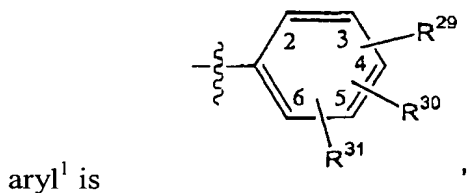
R^{38} is H, $-C_{1-6}$ -alkyl, $-C_{3-8}$ -cycloalkyl, $-(C_{1-6}$ -alkyl)- C_{3-8} -cycloalkyl, -aryl, $-(C_{1-6}$ -alkyl)-aryl;

and

R^{39} is H, $-C_{1-6}$ -alkyl, $-C_{3-8}$ -cycloalkyl, $-(C_{1-6}$ -alkyl)- C_{3-8} -cycloalkyl, -aryl, $-(C_{1-6}$ -alkyl)-aryl, -heterocyclyl or $-(C_{1-6}$ -alkyl)-heterocyclyl.

6. (original) A compound according to claim 1, wherein

R^1 and R^2 are independently selected from the group consisting of H, $O-R^9$, $S-R^{10}$, or unsubstituted, singly substituted, or multiply substituted methyl, ethyl, n-propyl, 2-propyl, n-butyl, tert.-butyl or n-hexyl, aryl' or $-CH_2$ -aryl', where aryl' is aryl¹, aryl², or aryl³,



where R^{29} , R^{30} and R^{31} are independently selected from the group consisting of H, methyl, ethyl, 2-propyl, n-butyl, tert.-butyl, n-hexyl, F, Cl, Br, I, OH, O-methyl, and O-ethyl,

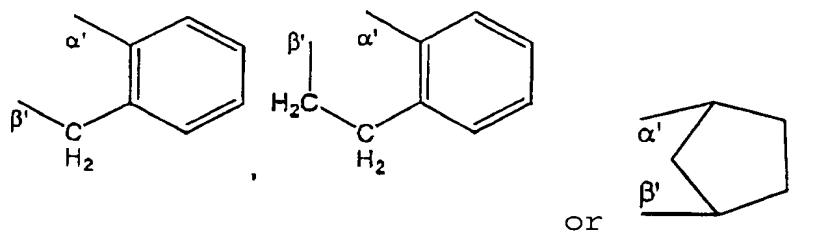
wherein exactly one of R^1 and R^2 is H, or wherein one of the radicals R^1 and R^2 is aryl' and the other radical of R^1 and R^2 is H, methyl, ethyl, n-propyl, 2-propyl, n-butyl, tert.-butyl or n-hexyl,

R^3 and R^4 are independently selected from the group consisting of H, methyl or aryl', wherein the aryl' substituents R^{29} , R^{30} and R^{31} are independent selected from the group consisting of H, methyl and O-methyl,

wherein at least one of the radicals R^3 and R^4 is H,

or

one of the radicals R^1 and R^2 together with one of the radicals R^3 and R^4 form W, where W is $\alpha' -CH=CH-CH_2-\beta'$, $\alpha' -CH=CH-CH_2-CH_2-\beta'$, $\alpha' -O-(CH_2)_m-\beta'$ where $m = 2, 3, 4$ or 5 , or where W corresponds to



where the end of W identified by α' is joined to the atom identified by α in the compound corresponding to structure (I A), (I B) or (II), the end of W identified by β' is joined to the atom identified by β in the compound corresponding to structure (I A), (I B) or (II), and the other radical of R^1 and R^2 and the other radical of R^3 and R^4 is H;

R^5 is methyl, ethyl, n-propyl, 2-propyl, n-butyl, isobutyl, sec.-butyl, tert.-butyl, $-(CH_2)_4-OH$, cyclopropyl that is unsubstituted or singly substituted by $C(=O)OH$, $C(=O)O$ -methyl or $C(=O)O$ -ethyl, cyclopentyl, cyclohexyl, aryl' or

$-(CH_2)_k$ -aryl¹ where the aryl¹ substituents R²⁹, R³⁰ and R³¹ are independently selected from the group consisting of H, -OH, -O-methyl, O-C₆H₅, CH₃, CF₃ or C(=O)OH and k = 1 or 2, or R⁵ is heterocyclyl or C(=O)R¹¹;

R⁶ is H, -CN, bromine, -C(=O)R¹⁷ or -N=N-phenyl;

R⁷ is H, methyl, ethyl, n-propyl, 2-propyl, n-butyl, isobutyl, sec.-butyl or tert.-butyl, or aryl¹ where R²⁹, R³⁰ and R³¹ are independently selected from the group consisting of H, OH, or S(O)_qR¹⁹ where q = 0 or 2,

R⁸ is H, aryl¹ where the aryl¹ substituents R²⁹, R³⁰ and R³¹ are independently selected from the group consisting of H, methyl or chlorine, or aryl³ where R²⁹, R³⁰ and R³¹ are H,

or

the radicals R⁷ and R⁸ together form Y, where Y is γ' -CR²¹=CR²²-CR²³=CR²⁴- δ' , where the end of Y identified by γ' is joined to the atom identified by γ in the compound corresponding to structure (II), and the end of Y identified by δ' is joined to the atom identified by δ in the compound corresponding to structure (II);

R⁹ is methyl, ethyl, n-propyl, 2-propyl, n-butyl, isobutyl, sec.-butyl, tert.-butyl, n-amyl, isoamyl, sec.-amyl, n-hexyl, isohexyl, sec.-hexyl, cyclopropyl, cyclopentyl, cyclohexyl, or $-[(CH_2)_r-O]_s-H$ where r = 1, 2 or 3 and s = 1 or 2;

R¹⁰ is aryl¹;

R¹¹ is aryl¹ where R²⁹, R³⁰ and R³¹ are H or OR²⁵;

R¹⁷ is OR²⁶;

R¹⁹ is methyl or aryl¹, where one of the aryl¹ substituents R²⁹, R³⁰ and R³¹ is H or -NO₂, and the two other aryl¹ substituents of R²⁹, R³⁰ and R³¹ are H;

R²¹ and R²³ are H;

R^{22} is H, fluorine or OR^{26} ;

R^{24} is H or chlorine;

R^{25} is H, methyl or ethyl, where R^{25} is not H when R^1 is aryl and R^2 is alkyl;

R^{26} is H, methyl or ethyl;

R^{28} is methyl or ethyl; and

Heterocyclyl is furan-2-yl, furan-3-yl, thien-2-yl, thien-3-yl, pyridin-2-yl, pyridin-3-yl or pyridin-4-yl, where furanyl, thienyl and pyridinyl are unsubstituted, singly substituted, or multiply substituted by $-NO_2$, CH_3 or $C(=O)OH$, where multiple substitution comprises replacement of multiple hydrogens bonded to one or more atoms by one or more substituents.

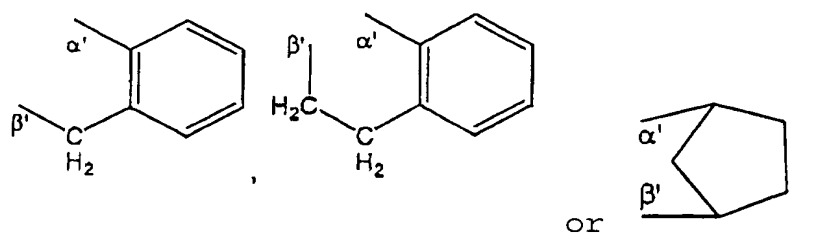
7. (original) A compound according to claim 1, wherein

R^1 and R^2 are independently selected from the group consisting of H, $O-CH_2-CH_2-OH$, O -cyclohexyl, S -phenyl, methyl, phenyl, 3-fluorophenyl, 3-bromophenyl, 4-bromophenyl, 4-chlorophenyl, 4-fluorophenyl, 3-methylphenyl, 4-hydroxyphenyl, 4-methoxyphenyl, 2,4-dimethylphenyl, 3,4-dimethoxyphenyl, 2,3,4-trimethoxyphenyl, 2-naphthyl or $-CH_2$ -phenyl,

R^3 and R^4 are H, methyl or 4-methoxyphenyl, where at least one of R^3 and R^4 is H,

or

one of the radicals R^1 and R^2 together with one of the radicals R^3 and R^4 form W, where W is $\alpha'-CH=CH-CH_2-\beta'$, $\alpha'-CH=CH-CH_2-CH_2-\beta'$, or $\alpha'-O-(CH_2)_m-\beta'$ where $m = 2, 3, 4$ or 5 , or where W corresponds to



where the end of W identified by α' is joined to the atom identified by α in the compound corresponding to structure (I A), (I B) or (II), the end of W identified by β' is joined to the atom identified by β in the compound corresponding to structure (I A), (I B) or (II), and the other radical of R^1 and R^2 and the other radical of R^3 and R^4 are H;

R^5 is n-propyl, n-butyl, tert.-butyl, $-(CH_2)_4-OH$, cyclopropyl, cycloprop-2-yl-1-carboxylic acid ethyl ether, cyclohexyl, 4-trifluorophenyl, 4-phenoxyphenyl, 2-hydroxy-3-methoxyphenyl, 4-hydroxy-3-methoxyphenyl, 3-carboxy-2-hydroxy-phenyl, $-(CH_2)_2$ -phenyl, 5-carboxyfuran-2-yl, 5-methylfuran-2-yl, 5-nitrofuran-2-yl, 5-nitro-thien-2-yl, pyridin-2-yl, pyridin-3-yl, $C(=O)$ -phenyl, $C(=O)OH$ or $C(=O)Oethyl$, where R^5 is not $C(=O)OH$ when both R^1 is aryl and R^2 is alkyl;

R^6 is H, -CN, bromine, $-C(=O)OH$, $-C(=O)Oethyl$ or -N=N-phenyl;

R^7 is H, phenyl, OH, -S-methyl, $-SO_2$ -(4-nitrophenyl) or tert.-butyl;

R^8 is 4-chlorophenyl, 4-methylphenyl or 2-naphthyl;

or

the radicals R^7 and R^8 together form Y, where Y is $\gamma'-CR^{21}=CR^{22}-CR^{23}=CR^{24}-\delta'$, where the end of Y identified by γ' is joined to the atom identified by γ in the compound corresponding to structure (II), and the end of Y identified by δ' is joined to the atom identified by δ in the compound corresponding to structure (II);

and

R²¹ is fluorine, methoxy or ethoxy.

8. (original) A compound according to claim 1, wherein the compound is selected from the group consisting of:

- 3-bromo-5-(5-nitrofuranyl)-7-m-tolyltetrahydro-pyrazolo[1,5-a]pyrimidine
- 3-bromo-7-(4-fluorophenyl)-7-methyl-5-(5-nitrofuranyl)-tetrahydropyrazolo[1,5-a]pyrimidine
- 3-bromo-7-naphthalin-2-yl-5-(5-nitrofuranyl)-tetrahydropyrazolo[1,5-a]pyrimidine
- 2-(3-bromo-7-m-tolyltetrahydropyrazolo[1,5-a]-pyrimidin-5-yl)-cyclopropanecarboxylic acid ethyl ester
- 2-[3-bromo-7-(4-bromophenyl)-tetrahydropyrazolo[1,5-a]pyrimidin-5-yl]-cyclopropanecarboxylic acid ethyl ester
- 2-(3-bromo-7-naphthalin-2-yl-tetrahydropyrazolo[1,5-a]pyrimidin-5-yl)-cyclopropanecarboxylic acid ethyl ester
- 3-bromo-7-(4-fluorophenyl)-7-methyl-5-(5-methyl-furan-2-yl)-tetrahydropyrazolo[1,5-a]pyrimidine
- 3-bromo-7-(3,4-dimethoxyphenyl)-tetrahydropyrazolo-[1,5-a]pyrimidine-5-carboxylic acid ethyl ester
- 3-bromo-7-(4-methoxyphenyl)-tetrahydropyrazolo[1,5-a]pyrimidine-5-carboxylic acid ethyl ester
- 3-bromo-7-(4-methoxyphenyl)-tetrahydropyrazolo[1,5-a]pyrimidine-5-carboxylic acid
- 3-bromo-7-(2,4-dimethylphenyl)-5-(5-nitrofuranyl)-tetrahydropyrazolo[1,5-a]pyrimidine

- 3-bromo-7-(4-methoxyphenyl)-5-(5-nitrofuranyl)-tetrahydropyrazolo[1,5-a]pyrimidine
- 5,5a,6,8a-tetrahydro-3H-1,4,8b-triaza-as-indacene-3,5-dicarboxylic acid diethyl ester; 5,5a,6,8a-tetrahydro-4H-1,4,8b-triaza-as-indacene-3,5-dicarboxylic acid diethyl ester
- 2-hydroxy-3-phenylazo-5,5a,6,8a-tetrahydro-3H-1,4,8b-triaza-as-indacene-5-carboxylic acid ethyl ester; 2-hydroxy-3-phenylazo-5,5a,6,8a-tetrahydro-4H-1,4,8b-triaza-as-indacene-5-carboxylic acid ethyl ester
- 2-tert.-butyl-5,5a,6,8a-tetrahydro-3H-1,4,8b-triaza-as-indacene-5-carboxylic acid ethyl ester; 2-tert.-butyl-5,5a,6,8a-tetrahydro-3H-1,4,8b-triaza-as-indacene-5-carboxylic acid ethyl ester
- 3-bromo-2-phenyl-5,5a,6,8a-tetrahydro-3H-1,4,8b-triaza-as-indacene-5-carboxylic acid ethyl ester; 3-bromo-2-phenyl-5,5a,6,8a-tetrahydro-4H-1,4,8b-triaza-as-indacene-5-carboxylic acid ethyl ester
- 7-(2,3,4-trimethoxyphenyl)-tetrahydropyrazolo[1,5-a]pyrimidine-3,5-dicarboxylic acid diethyl ester
- 3-cyano-2-methylsulfonyl-7-(2,3,4-trimethoxyphenyl)-tetrahydropyrazolo[1,5-a]pyrimidine-5-carboxylic acid ethyl ester
- 2-hydroxy-7-(4-hydroxyphenyl)-6-methyl-3-phenylazo-tetrahydropyrazolo[1,5-a]pyrimidine-5-carboxylic acid ethyl ester
- 3-bromo-7-(4-hydroxyphenyl)-6-methyl-2-phenyltetrahydropyrazolo[1,5-a]pyrimidine-5-carboxylic acid ethyl ester
- 5,5a,6,10b-tetrahydro-3H-1,4,10c-triazacyclopenta-[c]fluorene-3,5-dicarboxylic acid diethyl ester; 5,5a,6,10b-tetrahydro-4H-1,4,10c-triazacyclopenta[c]fluorene-3,5-dicarboxylic acid diethyl ester

- 2-hydroxy-3-phenylazo-5,5a,6,10b-tetrahydro-3H-1,4,10c-triazacyclopenta[c]fluorene-5-carboxylic acid ethyl ester; 2-hydroxy-3-phenylazo-5,5a,6,10b-tetrahydro-4H-1,4,10c-triazacyclopenta[c]fluorene-5-carboxylic acid ethyl ester
- 7-phenylsulfanyltetrahydropyrazolo[1,5-a]pyrimidine-3,5-dicarboxylic acid diethyl ester
- 3-cyano-2-methylsulfanyl-7-phenylsulfanyltetrahydro-pyrazolo[1,5-a]pyrimidine-5-carboxylic acid ethyl ester
- 3-cyano-2-methylsulfanyl-7-(2,3,4-trimethoxyphenyl)-tetrahydropyrazolo[1,5-a]pyrimidine-5-carboxylic acid
- 7-phenylsulfanyltetrahydropyrazolo[1,5-a]pyrimidine-3,5-dicarboxylic acid-3-ethyl ester
- 3-cyano-7-(2,4-dimethylphenyl)-2-methylsulfanyl-tetrahydropyrazolo[1,5-a]pyrimidine-5-carboxylic acid ethyl ester
- 3-cyano-7-(2,4-dimethylphenyl)-tetrahydropyrazolo-[1,5-a]pyrimidine-5-carboxylic acid ethyl ester
- 7-(2,4-dimethylphenyl)-tetrahydropyrazolo-[1,5-a]pyrimidine-3,5-dicarboxylic acid-3-ethyl ester
- 3-bromo-7-(2,4-dimethylphenyl)-2-phenyltetrahydro-pyrazolo-[1,5-a]pyrimidine-5-carboxylic acid
- 3-cyano-7-(2,4-dimethylphenyl)-2-methylsulfanyl-tetrahydropyrazolo[1,5-a]pyrimidine-5-carboxylic acid
- 3-cyano-7-(2,4-dimethylphenyl)-tetrahydropyrazolo-[1,5-a]pyrimidine-5-carboxylic acid

- 3-cyano-7-(3,4-dimethoxyphenyl)-2-methylsulfanyl-tetrahydropyrazolo[1,5-a]pyrimidine-5-carboxylic acid
- 7-(2,4-dimethylphenyl)-5-(5-nitrofuranyl)-tetrahydropyrazolo[1,5-a]pyrimidine-3-carboxylic acid ethyl ester
- 7-(2,4-dimethylphenyl)-5-(5-nitrofuranyl)-3-phenylazotetrahydropyrazolo[1,5-a]pyrimidin-2-ol
- 3-bromo-7-(2,4-dimethylphenyl)-5-(5-nitrofuranyl)-2-phenylazotetrahydropyrazolo[1,5-a]pyrimidine
- 7-(2,4-dimethylphenyl)-2-methylsulfanyl-5-(5-nitrofuranyl)-tetrahydropyrazolo[1,5-a]pyrimidine-3-carbonitrile
- 7-(2,4-dimethylphenyl)-5-(5-nitrofuranyl)-tetrahydropyrazolo[1,5-a]pyrimidine-3-carbonitrile
- 3-bromo-7-(3,4-dimethoxyphenyl)-5-(5-nitrofuranyl)-2-phenyltetrahydropyrazolo[1,5-a]pyrimidine
- 7-(4-methoxyphenyl)-2-methylsulfanyl-5-(5-nitro-furanyl)-tetrahydropyrazolo[1,5-a]pyrimidine-3-carbonitrile
- 7-(2,4-dimethylphenyl)-5-(2-ethoxycarbonylcyclo-propyl)-tetrahydropyrazolo[1,5-a]pyrimidine-3-carboxylic acid ethyl ester
- 2-[7-(2,4-dimethylphenyl)-2-hydroxy-3-phenylazo-tetrahydropyrazolo[1,5-a]pyrimidin-5-yl]-cyclopropanecarboxylic acid ethyl ester
- 2-[2-tert.-butyl-7-(2,4-dimethylphenyl)tetrahydro-pyrazolo[1,5-a]pyrimidin-5-yl]cyclopropanecarboxylic acid ethyl ester
- 2-[3-bromo-7-(2,4-dimethylphenyl)-2-phenyltetra-hydropyrazolo[1,5-a]pyrimidin-5-yl]cyclopropane-carboxylic acid ethyl ester

- 2-[3-cyano-7-(2,4-dimethylphenyl)-2-methylsulfanyl-tetrahydropyrazolo[1,5-a]pyrimidin-5-yl]-cyclopropanecarboxylic acid ethyl ester
- 5-(2-ethoxycarbonylcyclopropyl)-7-(3-fluorophenyl)-tetrahydropyrazolo[1,5-a]pyrimidine-3-carboxylic acid ethyl ester
- 2-[3-bromo-7-(3-bromophenyl)-2-phenyltetrahydro-pyrazolo[1,5-a]pyrimidin-5-yl]cyclopropane-carboxylic acid ethyl ester
- 2-[7-(3-bromophenyl)-3-cyano-2-methylsulfanyl-tetrahydropyrazolo[1,5-a]pyrimidin-5-yl]-cyclopropanecarboxylic acid ethyl ester
- 7-(2,4-dimethylphenyl)-5-(5-nitrothiophen-2-yl)-3-phenylazotetrahydropyrazolo[1,5-a]pyrimidin-2-ol
- 7-(2,4-dimethylphenyl)-2-methylsulfanyl-5-(5-nitrothiophen-2-yl)-tetrahydropyrazolo[1,5-a]-pyrimidine-3-carbonitrile
- 7-(2,4-dimethylphenyl)-5-(5-nitrothiophen-2-yl)-tetrahydropyrazolo[1,5-a]pyrimidine-3-carbonitrile
- 7-(3,4-dimethoxyphenyl)-5-(5-nitrothiophen-2-yl)-tetrahydropyrazolo[1,5-a]pyrimidine-3-carboxylic acid ethyl ester
- 7-(3,4-dimethoxyphenyl)-5-(5-nitrothiophen-2-yl)-3-phenylazotetrahydropyrazolo[1,5-a]pyrimidin-2-ol
- 3-bromo-7-(3,4-dimethoxyphenyl)-5-(5-nitrothiophen-2-yl)-2-phenyltetrahydropyrazolo[1,5-a]pyrimidine
- 7-(3,4-dimethoxyphenyl)-2-methylsulfanyl-5-(5-nitrothiophen-2-yl)-tetrahydropyrazolo[1,5-a]-pyrimidine-3-carbonitrile
- 7-(3,4-dimethoxyphenyl)-5-(5-nitrothiophen-2-yl)-tetrahydropyrazolo[1,5-a]pyrimidine-3-carbonitrile

- 7-(4-methoxyphenyl)-5-(5-nitrothiophen-2-yl)-tetrahydropyrazolo[1,5-a]pyrimidine-3-carboxylic acid ethyl ester
- 5-[3-bromo-7-(4-methoxyphenyl)-2-phenyltetrahydro-pyrazolo[1,5-a]pyrimidin-5-yl]-furan-2-carboxylic acid
- 5-benzoyl-7-(2,4-dimethylphenyl)-tetrahydropyrazolo-[1,5-a]pyrimidine-3-carboxylic acid ethyl ester
- 5-benzoyl-7-(2,4-dimethylphenyl)-2-methylsulfanyl-tetrahydropyrazolo[1,5-a]pyrimidine-3-carbonitrile
- 5-benzoyl-7-(2,4-dimethylphenyl)-tetrahydropyrazolo-[1,5-a]pyrimidine-3-carbonitrile
- 5-benzoyl-7-(3,4-dimethoxyphenyl)-tetrahydro-pyrazolo[1,5-a]pyrimidine-3-carboxylic acid ethyl ester
- [3-bromo-7-(3,4-dimethoxyphenyl)-2-phenyltetrahydro-pyrazolo[1,5-a]pyrimidin-5-yl]-phenylmethanone
- 5-benzoyl-7-(3,4-dimethoxyphenyl)-2-methylsulfanyl-tetrahydropyrazolo[1,5-a]pyrimidine-3-carbonitrile
- 5-benzoyl-7-(3,4-dimethoxyphenyl)tetrahydropyrazolo-[1,5-a]pyrimidine-3-carbonitrile
- 5-benzoyl-7-(4-methoxyphenyl)-tetrahydropyrazolo-[1,5-a]pyrimidine-3-carboxylic acid ethyl ester
- 5-benzoyl-7-(4-methoxyphenyl)-2-methylsulfanyl-tetrahydropyrazolo[1,5-a]pyrimidine-3-carbonitrile
- 5-benzoyl-7-(4-methoxyphenyl)tetrahydropyrazolo-[1,5-a]pyrimidine-3-carbonitrile

- 5-benzoyl-7-(3-fluorophenyl)-tetrahydropyrazolo-[1,5-a]pyrimidine-3-carboxylic acid ethyl ester
- [3-bromo-7-(3-fluorophenyl)-2-phenyltetrahydro-pyrazolo[1,5-a]pyrimidin-5-yl]-phenylmethanone
- [3-bromo-7-(3-bromophenyl)-2-phenyltetrahydro-pyrazolo[1,5-a]pyrimidin-5-yl]-phenylmethanone
- 7-(2,4-dimethylphenyl)-5-(4-phenoxyphenyl)tetra-hydropyrazolo[1,5-a]pyrimidine-3-carboxylic acid ethyl ester
- 3-bromo-7-(2,4-dimethylphenyl)-5-(4-phenoxyphenyl)-2-phenyltetrahydropyrazolo[1,5-a]pyrimidine
- 7-(2,4-dimethylphenyl)-2-methylsulfanyl-5-(4-phenoxyphenyl)-tetrahydropyrazolo[1,5-a]pyrimidine-3-carbonitrile
- 7-(2,4-dimethylphenyl)-5-(4-phenoxyphenyl)-tetrahydropyrazolo[1,5-a]pyrimidine-3-carbonitrile
- 7-(3,4-dimethoxyphenyl)-5-(4-phenoxyphenyl)-tetrahydropyrazolo[1,5-a]pyrimidine-3-carboxylic acid ethyl ester
- 7-(3,4-dimethoxyphenyl)-2-methylsulfanyl-5-(4-phenoxyphenyl)-tetrahydropyrazolo[1,5-a]pyrimidine-3-carbonitrile
- 3-[3-cyano-7-(4-hydroxyphenyl)-6-methyltetrahydro-pyrazolo[1,5-a]pyrimidin-5-yl]-2-hydroxybenzoic acid
- 3-(3-cyano-5,5a,6,10b-tetrahydro-3H-1,4,10c-triaza-cyclopenta[c]fluoren-5-yl)-2-hydroxybenzoic acid;
3-(3-cyano-5,5a,6,10b-tetrahydro-4H-1,4,10c-triaza-cyclopenta[c]fluoren-5-yl)-2-hydroxybenzoic acid

- 3-(3-cyano-7-phenylsulfanyltetrahydropyrazolo[1,5-a]pyrimidin-5-yl)-2-hydroxybenzoic acid
- 3-[2-tert.-butyl-7-(4-chlorophenyl)-7-methyltetra-hydropyrazolo[1,5-a]pyrimidin-5-yl]-2-hydroxybenzoic acid
- 5-(4-hydroxy-3-methoxyphenyl)-7-(4-hydroxyphenyl)-6-methyltetrahydropyrazolo[1,5-a]pyrimidine-3-carboxylic acid ethyl ester
- 5-(4-hydroxy-3-methoxyphenyl)-7-(4-hydroxyphenyl)-6-methyltetrahydropyrazolo[1,5-a]pyrimidine-3-carbonitrile
- 5-(4-hydroxy-3-methoxyphenyl)-5,5a,6,10b-tetrahydro-3H-1,4,10c-triazacyclopenta[c]fluorene-3-carboxylic acid ethyl ester; 5-(4-hydroxy-3-methoxyphenyl)-5,5a,6,10b-tetrahydro-4H-1,4,10c-triazacyclopenta-[c]fluorene-3-carboxylic acid ethyl ester
- 4-(2-tert.-butyl-5,5a,6,10b-tetrahydro-3H-1,4,10c-triazacyclopenta[c]fluoren-5-yl)-2-methoxyphenol;

4-(2-tert.-butyl-5,5a,6,10b-tetrahydro-4H-1,4,10c-triazacyclopenta[c]fluoren-5-yl)-2-methoxyphenol
- 5-(4-hydroxy-3-methoxyphenyl)-2-methylsulfanyl-5,5a,6,10b-tetrahydro-3H-1,4,10c-triazacyclo-penta[c]fluorene-3-carbonitrile; 5-(4-hydroxy-3-methoxyphenyl)-2-methylsulfanyl-5,5a,6,10b-tetrahydro-3H-1,4,10c-triazacyclopenta[c]fluorene-3-carbonitrile
- 5-(4-hydroxy-3-methoxyphenyl)-7-phenylsulfanyl-tetrahydropyrazolo[1,5-a]pyrimidine-3-carboxylic acid ethyl ester
- 4-(2-tert.-butyl-7-phenylsulfanyl-tetrahydro-pyrazolo[1,5-a]pyrimidin-5-yl)-2-methoxyphenol
- 4-(3-bromo-2-phenyl-7-phenylsulfanyl-tetrahydro-pyrazolo[1,5-a]pyrimidin-5-yl)-2-methoxyphenol

- 5-(2-hydroxy-3-methoxyphenyl)-7-phenylsulfanyl-tetrahydropyrazolo[1,5-a]pyrimidine-3-carboxylic acid ethyl ester
- 7-(4-chlorophenyl)-5-(2-hydroxy-3-methoxyphenyl)-7-methyltetrahydropyrazolo[1,5-a]pyrimidine-3-carboxylic acid ethyl ester
- 5-(4-hydroxybutyl)-5,5a,6,10b-tetrahydro-3H-1,4,10c-triazacyclopenta[c]fluorene-3-carbonitrile; 5-(4-hydroxybutyl)-5,5a,6,10b-tetrahydro-4H-1,4,10c-triazacyclopenta[c]fluorene-3-carbonitrile
- 5-(4-hydroxybutyl)-2-methylsulfanyl-7-phenyl-sulfanyltetrahydropyrazolo[1,5-a]pyrimidine-3-carbonitrile
- 5-(4-hydroxybutyl)-7-phenylsulfanyltetrahydro-pyrazolo[1,5-a]pyrimidine-3-carbonitrile
- 7-(4-chlorophenyl)-5-(4-hydroxybutyl)-7-methyltetra-hydropyrazolo[1,5-a]pyrimidine-3-carbonitrile
- 5-butyl-2-methylsulfanyl-5,5a,6,10b-tetrahydro-3H-1,4,10c-triazacyclopenta[c]fluorene-3-carbonitrile; 5-butyl-2-methylsulfanyl-5,5a,6,10b-tetrahydro-4H-1,4,10c-triazacyclopenta[c]fluorene-3-carbonitrile
- 5-butyl-2-methylsulfanyl-7-phenylsulfanyltetrahydro-pyrazolo[1,5-a]pyrimidine-3-carbonitrile
- 5-butyl-7-phenylsulfanyl-tetrahydropyrazolo[1,5-a]pyrimidine-3-carbonitrile
- 5-butyl-(4-chlorophenyl)-7-methylsulfanyltetrahydro-pyrazolo[1,5-a]pyrimidine-3-carbonitrile
- 5-cyclopropyl-7-(2,4-dimethylphenyl)-3-phenylazo-tetrahydropyrazolo[1,5-a]pyrimidin-2-ol
- 2-tert.-butyl-5-cyclopropyl-7-(2,4-dimethylphenyl)-tetrahydropyrazolo[1,5-a]pyrimidine

- 5-cyclopropyl-7-(2,4-dimethylphenyl)-2-methyl-sulfanyltetrahydro-pyrazolo[1,5-a]pyrimidine-3-carbonitrile
- 2-tert.-butyl-5-cyclopropyl-7-(3,4-dimethoxyphenyl)-tetrahydropyrazolo[1,5-a]pyrimidine
- 3-bromo-5-cyclopropyl-7-(3,4-dimethoxyphenyl)-2-phenyltetrahydropyrazolo[1,5-a]pyrimidine
- 5-cyclopropyl-7-(4-methoxyphenol)-tetrahydro-pyrazolo[1,5-a]pyrimidine-3-carboxylic acid ethyl ester
- 5-cyclopropyl-3,5,5a,6,7,11b-hexahydro-1,4,11c-triazacyclopenta[c]phenanthrene-3-carbonitrile
- 7-(2,4-dimethylphenyl)-5-pyridin-2-yl-tetrahydro-pyrazolo[1,5-a]pyrimidine-3-carboxylic acid ethyl ester
- 7-(2,4-dimethylphenyl)-3-phenylazo-5-pyridin-2-yl-tetrahydropyrazolo[1,5-a]pyrimidin-2-ol
- 3-bromo-7-(2,4-dimethylphenyl)-2-phenyl-5-pyridin-2-yl-tetrahydropyrazolo[1,5-a]pyrimidine
- 7-(2,4-dimethylphenyl)-2-methylsulfanyl-5-pyridin-2-yl-tetrahydropyrazolo[1,5-a]pyrimidine-3-carbonitrile
- 7-(3,4-dimethoxyphenyl)-2-methylsulfanyl-5-phenethyl-tetrahydropyrazolo[1,5-a]pyrimidine-3-carbonitrile
- 7-(3,4-dimethoxyphenyl)-5-phenethyl-tetrahydro-pyrazolo[1,5-a]pyrimidine-3-carbonitrile
- 5-cyclopropyl-7-(2-hydroxyethoxy)-tetrahydro-pyrazolo[1,5-a]pyrimidine-3-carboxylic acid ethyl ester

- 2-(2-tert.-butyl-5-cyclopropyltetrahydropyrazolo-[1,5-a]pyrimidin-7-yloxy)-ethanol
- 5-cyclopropyl-3,5,5a,6,7,8a-hexahydro-8-oxa-1,4,8b-triaza-as-indacene-3-carboxylic acid ethyl ester;

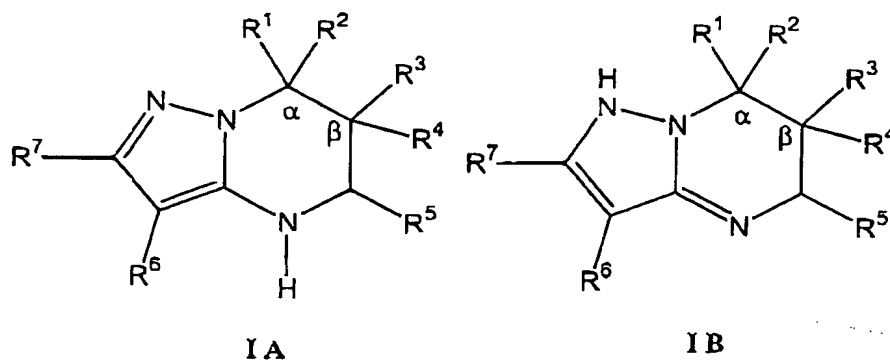
5-cyclopropyl-4,5,5a,6,7,8a-hexahydro-8-oxa-1,4,8b-triaza-as-indacene-3-carboxylic acid ethyl ester
- 5-cyclopropyl-3-phenylazo-3,5,5a,6,7,8a-hexahydro-8-oxa-1,4,8b-triaza-as-indacen-2-ol; 5-cyclopropyl-3-phenylazo-4,5,5a,6,7,8a-hexahydro-8-oxa-1,4,8b-triaza-as-indacen-2-ol
- 7-cyclohexyloxy-5-cyclopropyltetrahydropyrazolo-[1,5-a]pyrimidin-3-carboxylic acid ethyl ester
- 7-cyclohexyloxy-5-cyclopropyl-2-methylsulfanyl-tetrahydropyrazolo[1,5-a]pyrimidin-3-carbonitrile
- 7-(4-chlorophenyl)-5-cyclohexyltetrahydropyrazolo-[1,5-a]pyrimidin-3-carbonitrile
- 5-cyclohexyl-7-(2-hydroxyethoxy)-tetrahydropyrazolo-[1,5-a]pyrimidine-3-carboxylic acid ethyl ester
- 5-cyclohexyl-3,5,5a,6,7,8a-hexahydro-8-oxa-1,4,8b-triaza-as-indacene-3-carboxylic acid ethyl ester; 5-cyclohexyl-4,5,5a,6,7,8a-hexahydro-8-oxa-1,4,8b-triaza-as-indacene-3-carboxylic acid ethyl ester
- 5-cyclohexyl-7-cyclohexyloxytetrahydropyrazolo[1,5-a]pyrimidine-3-carboxylic acid ethyl ester
- 7-(2,4-dimethylphenyl)-3-phenylazo-5-propyltetra-hydropyrazolo[1,5-a]pyrimidin-2-ol
- 7-(2,4-dimethylphenyl)-2-methylsulfanyl-5-propyl-tetrahydropyrazolo[1,5-a]pyrimidine-3-carbonitrile

- 5-tert.-butyl-7-(2,4-dimethylphenyl)-tetrahydro-pyrazolo[1,5-a]pyrimidine-3-carboxylic acid ethyl ester
- 2,5-di-tert.-butyl-7-(3,4-dimethoxyphenyl)-tetra-hydropyrazolo[1,5-a]pyrimidine
- 3-bromo-5-tert.-butyl-7-(3,4-dimethoxyphenyl)-2-phenyltetrahydropyrazolo[1,5-a]pyrimidine
- 2-[3-cyano-6,7-bis-(4-methoxyphenyl)-tetrahydro-pyrazolo[1,5-a]pyrimidin-5-yl]-cyclopropanecarboxylic acid ethyl ester
- 3-cyano-6,7-bis-(4-methoxyphenyl)-tetrahydro-pyrazolo[1,5-a]pyrimidine-5-carboxylic acid
- 4-[3-bromo-6-methyl-2-phenyl-5-(4-trifluoromethyl-phenyl)-tetrahydropyrazolo[1,5-a]pyrimidin-7-yl]-phenol
- 7-(4-hydroxyphenyl)-6-methyl-2-methylsulfanyl-5-(4-trifluoro-methylphenyl)-tetrahydropyrazolo[1,5-a]-pyrimidine-3-carbonitrile
- 7-(4-hydroxyphenyl)-6-methyl-5-(4-trifluoromethyl-phenyl)-tetrahydropyrazolo[1,5-a]pyrimidine-3-carbonitrile
- 2-(4-nitrophenylsulfonyl)-5-phenylsulfanyl-7-pyridin-2-yl-6,7-dihydro-5H-thiazolo[3,2-a]-pyrimidine
- 3-(4-chlorophenyl)-5-phenylsulfanyl-7-pyridin-2-yl-6,7-dihydro-5H-thiazolo[3,2-a]pyrimidine
- 5-phenylsulfanyl-7-pyridin-2-yl-3-p-tolyl-6,7-dihydro-5H-thiazolo[3,2-a]pyrimidine
- 7-methoxy-4-phenylsulfanyl-2-pyridin-2-yl-3,4-dihydro-2H-9-thia-1,4a-diazafluorene
- 7-ethoxy-4-phenylsulfanyl-2-pyridin-2-yl-3,4-dihydro-2H-9-thia-1,4a-diazafluorene

- 7-fluoro-4-phenylsulfanyl-2-pyridin-2-yl-3,4-dihydro-2H-9-thia-1,4a-diazafluorene
- 3-naphthalin-2-yl-5-phenylsulfanyl-7-pyridin-2-yl-6,7-dihydro-5H-thiazolo[3,2-a]pyrimidine
- 7-phenyl-3-phenylazo-5-pyridin-2-yl-3,5,6,7-tetrahydropyrazolo[1,5-a]pyrimidin-2-ol
- 7-phenylsulfanyl-5-pyridin-2-yl-3,5,6,7-tetrahydro-pyrazolo[1,5-a]pyrimidine-3-carboxylic acid ethyl ester
- 3-phenylazo-7-phenylsulfanyl-5-pyridin-2-yl-3,5,6,7-tetrahydropyrazolo[1,5-a]pyrimidin-2-ol
- 3-bromo-7-phenylsulfanyl-5-pyridin-2-yl-3,5,6,7-tetrahydropyrazolo[1,5-a]pyrimidine
- 7-phenylsulfanyl-5-pyridin-2-yl-3,5,6,7-tetrahydro-pyrazolo[1,5-a]pyrimidine-3-carbonitrile
- 7-(3,4-dimethoxyphenyl)-2-methylsulfanyl-5-pyridin-2-yl-tetrahydropyrazolo[1,5-a]pyrimidine-3-carbonitrile
- 3-bromo-7-(3,4-dimethoxyphenyl)-2-phenyl-5-pyridin-2-yl-tetrahydropyrazolo[1,5-a]pyrimidine
- 3-bromo-7-(3,4-dimethoxyphenyl)-2-phenyl-tetrahydro-pyrazolo[1,5-a]pyrimidine-5-carboxylic acid ethyl ester
- 3-bromo-7-(3,4-dimethoxyphenyl)-5-(5-nitrofuran-2-yl)-2-phenyl-tetrahydropyrazolo[1,5-a]pyrimidine
- 3-cyano-7-(3,4-dimethoxyphenyl)-2-methylsulfanyl-tetrahydropyrazolo[1,5-a]pyrimidine-5-carboxylic acid ethyl ester

- 3-cyano-7-(3,4-dimethoxyphenyl)-tetrahydropyrazolo-[1,5-a]pyrimidine-5-carboxylic acid ethyl ester
- 3-bromo-7-(3,4-dimethoxyphenyl)-2-phenyl-5-pyridin-2-yl-4,5,6,7-tetrahydropyrazolo[1,5-a]pyrimidine
- 7-(3,4-dimethoxyphenyl)-5-pyridin-2-yl-4,5,6,7-tetrahydropyrazolo[1,5-a]pyrimidine-3-carbonitrile
- 7-(3,4-dimethoxyphenyl)-2-methylsulfanyl-5-(5-nitro-furan-2-yl)-tetrahydropyrazolo[1,5-a]pyrimidine-3-carbonitrile, and
- 7-(3,4-dimethoxyphenyl)-5-pyridin-2-yl-4,5,6,7-tetrahydropyrazolo[1,5-a]pyrimidine-3-carboxylic acid ethyl ester.

9. (original) A process for the preparation of compounds corresponding to structure (I A) or (I B) as well as their pharmaceutically acceptable salts



wherein

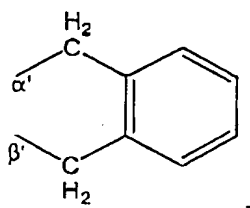
R^1 and R^2 are independently selected from the group consisting of H, $O-R^9$, $S-R^{10}$, C_{1-12} -alkyl, C_{3-8} -cycloalkyl, $-CH_2-C_{3-8}$ -cycloalkyl, aryl, $-(C_{1-6}$ -alkyl)-aryl, heterocyclyl or $-(C_{1-6}$ alkyl)-heterocyclyl,

wherein exactly one of the radicals R^1 and R^2 is H, or wherein one of the radicals R^1 and R^2 is aryl and the other radical of R^1 and R^2 is H or C_{1-12} -alkyl,

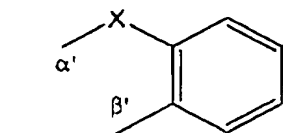
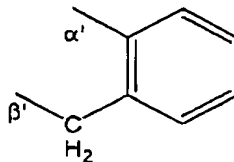
R^3 and R^4 are selected from the group consisting of H, C_{1-12} -alkyl, C_{3-8} -cycloalkyl, $-CH_2-C_{3-8}$ -cycloalkyl, aryl or $-(C_{1-6}$ -alkyl)-aryl, wherein at least one of the radicals R^3 and R^4 is H,

or

one of the radicals R^1 and R^2 together with one of the radicals R^3 and R^4 form W, where W is $\alpha'-(CH_2)_n-\beta'$ where $n = 3, 4, 5$ or 6 , $\alpha'-CH=CH-CH_2-\beta'$, $\alpha'-CH_2-CH=CH-\beta'$, $\alpha'-CH=CH-CH_2-CH_2-\beta'$, $\alpha'-CH_2-CH=CH-CH_2-\beta'$, $\alpha'-CH_2-CH_2-CH=CH-\beta'$, or $\alpha'-O-(CH_2)_m-\beta'$ where $m = 2, 3, 4$ or 5 , or where W corresponds to

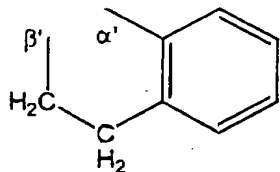


or

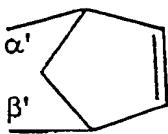


or

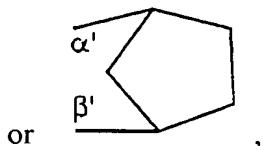
where $X = CH_2, O,$ or $S,$



or



or



or

where the end of W identified by α' is joined to the atom identified by α in the compound corresponding to structure (I A) or (I B), the end of W identified by β' is joined to the atom identified by β in the compound corresponding to structure (I A) or (I B), the other radical of R^1 and R^2 is H or C_{1-12} -alkyl, and the other radical of R^3 and R^4 is H or C_{1-12} -alkyl;

R^5 is C_{1-12} -alkyl, C_{3-8} -cycloalkyl, $-CH_2-C_{3-8}$ -cycloalkyl, aryl, $-(C_{1-6} \text{ alkyl})$ -aryl, heterocyclyl, $-(C_{1-6} \text{ alkyl})$ -heterocyclyl or $C(=O)R^{11}$;

R^6 is H, C_{1-8} -alkyl, $-CN$, fluorine, chlorine, bromine, iodine, NO_2 , NH_2 , NHR^{12} , $NR^{13}R^{14}$, OR^{15} , $S(O)_pR^{16}$ where $p = 0, 1$ or 2 , $-C(=O)R^{17}$ or $-N=N$ -aryl;

R^7 is H, C_{1-8} -alkyl, aryl, $-CN$, fluorine, chlorine, bromine, iodine, NO_2 , NH_2 , NHR^{12} , $NR^{13}R^{14}$, OR^{18} , $S(O)_qR^{19}$ where $q = 0, 1$ or 2 , or $C(=O)R^{20}$,

R^9 and R^{10} are independently selected from the group consisting of H, C_{1-8} -alkyl, C_{3-8} -cycloalkyl, $-CH_2-C_{3-8}$ -cycloalkyl, aryl and $-(C_{1-6}\text{-alkyl})$ -aryl;

R^{11} is H, C_{1-8} -alkyl, C_{3-8} -cycloalkyl, $-CH_2-C_{3-8}$ -cycloalkyl, aryl or OR^{25} ;

R^{12} is C_{1-6} -alkyl or $-CH_2$ -aryl;

R^{13} and R^{14} are identical or different C_{1-6} -alkyl radicals, or together are $-(CH_2)_h$ - and form a ring, where $h = 4$ or 5 ;

R^{15} and R^{16} are independently selected from the group consisting of H, C_{1-8} -alkyl, C_{3-8} -cycloalkyl, $-CH_2-C_{3-8}$ -cycloalkyl, aryl or $-(C_{1-6}\text{-alkyl})$ -aryl;

R^{17} is H, C_{1-8} -alkyl, C_{3-8} -cycloalkyl, $-CH_2-C_{3-8}$ -cycloalkyl, aryl, $-(C_{1-6}\text{-alkyl})$ -aryl, NH_2 , NHR^{12} , $NR^{13}R^{14}$ or OR^{26} ;

R^{18} and R^{19} are independently selected from the group consisting of H, C_{1-8} -alkyl, C_{3-8} -cycloalkyl, $-CH_2-C_{3-8}$ -cycloalkyl, aryl or $-(C_{1-6}\text{-alkyl})$ -aryl;

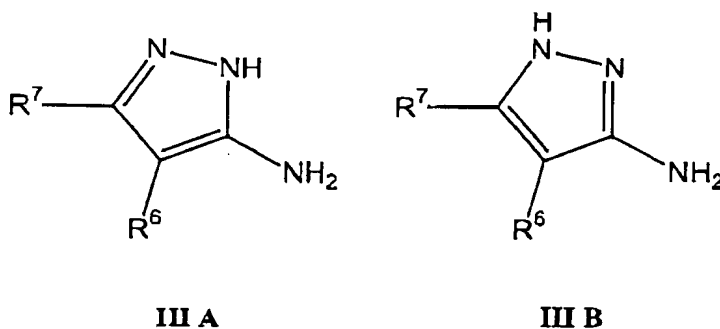
R^{20} is H, C_{1-8} -alkyl, C_{3-8} -cycloalkyl, $-CH_2-C_{3-8}$ -cycloalkyl, aryl or $-(C_{1-6}\text{-alkyl})$ -aryl or OR^{27} ;

and

R^{25} , R^{26} , and R^{27} are independently selected from the group consisting of H and C_{1-6} -alkyl, where R^{25} is not H when both R^1 is aryl and R^2 is alkyl;

comprising

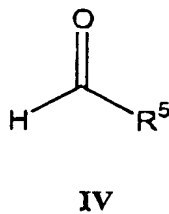
reacting a pyrazolamine corresponding to structure (IIIA) or (IIIB),



wherein

R^6 and R^7 are as defined above in this claim,

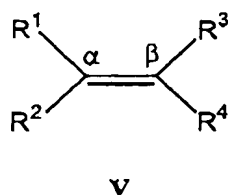
in the presence of an acid, with an aldehyde corresponding to structure (IV)



wherein

R^5 is as defined above in this claim,

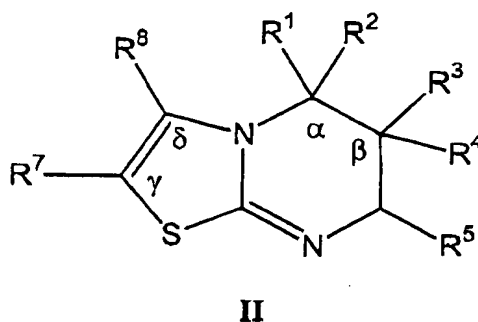
and with an olefin corresponding to structure (V)



wherein

R^1 , R^2 , R^3 and R^4 are as defined above in this claim, with the proviso that if one of the radicals R^1 and R^2 together with one of the radicals R^3 and R^4 forms W, the end of W identified by α' is joined to the α -carbon atom of the olefin of the general structure (V), and the end of W identified by β' is joined to the β -carbon atom of the olefin of the general structure (V).

10. (original) A process according to claim 9, wherein the reaction of the heterocyclamine corresponding to structure (III A) or (III B) with the aldehyde corresponding to structure (IV) and with the olefin corresponding to structure (V) is carried out in a one-pot process.
11. (original) A process according to claim 9, wherein the acid is trifluoroacetic acid.
12. (original) A process according to of claim 9, wherein the reaction is carried out in an organic solvent at a temperature of 0° to 100°C and at a reaction time of 0.25 to 12 hours.
13. (original) A process according to claim 9, wherein the reaction is carried out at a temperature of 15° to 40°C.
14. (original) A process for the preparation of compounds corresponding to structure (II) or pharmaceutically acceptable salts thereof



wherein

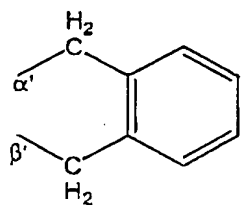
R^1 and R^2 are independently selected from the group consisting of H, $O-R^9$, $S-R^{10}$, C_{1-12} -alkyl, C_{3-8} -cycloalkyl, $-CH_2-C_{3-8}$ -cycloalkyl, aryl, $-(C_{1-6}$ -alkyl)-aryl, heterocyclyl or $-(C_{1-6}$ alkyl)-heterocyclyl,

wherein exactly one of the radicals R^1 and R^2 is H, or wherein one of the radicals R^1 and R^2 is aryl and the other radical of R^1 and R^2 is H or C_{1-12} -alkyl,

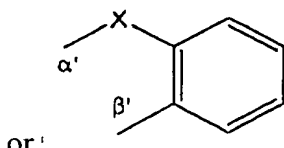
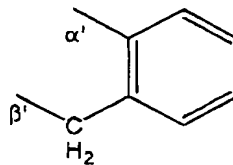
R^3 and R^4 are selected from the group consisting of H, C_{1-12} -alkyl, C_{3-8} -cycloalkyl, $-CH_2-C_{3-8}$ -cycloalkyl, aryl or $-(C_{1-6}$ -alkyl)-aryl, wherein at least one of the radicals R^3 and R^4 is H,

or

one of the radicals R^1 and R^2 together with one of the radicals R^3 and R^4 form W, where W is $\alpha'-(CH_2)_n-\beta'$ where $n = 3, 4, 5$ or 6 , $\alpha'-CH=CH-CH_2-\beta'$, $\alpha'-CH_2-CH=CH-\beta'$, $\alpha'-CH=CH-CH_2-CH_2-\beta'$, $\alpha'-CH_2-CH=CH-CH_2-\beta'$, $\alpha'-CH_2-CH_2-CH=CH-\beta'$, or $\alpha'-O-(CH_2)_m-\beta'$ where $m = 2, 3, 4$ or 5 , or where W corresponds to

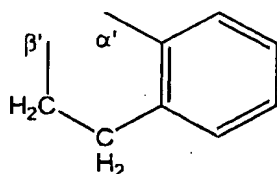


or

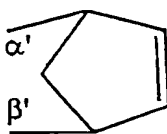


or

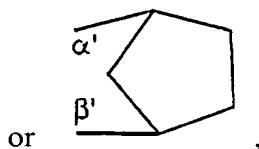
where X = CH₂, O, or S,



or



or



or

where the end of W identified by α' is joined to the atom identified by α in the compound corresponding to structure (II), the end of W identified by β' is joined to the atom identified by β in the compound corresponding to structure (II), the other radical of R¹ and R² is H or C₁₋₁₂-alkyl, and the other radical of R³ and R⁴ is H or C₁₋₁₂-alkyl;

R⁵ is C₁₋₁₂-alkyl, C₃₋₈-cycloalkyl, -CH₂-C₃₋₈-cycloalkyl, aryl, -(C₁₋₆ alkyl)-aryl, heterocyclyl, -(C₁₋₆ alkyl)-heterocyclyl or C(=O)R¹¹;

R⁷ is H, C₁₋₈-alkyl, aryl, -CN, fluorine, chlorine, bromine, iodine, NO₂, NH₂, NHR¹², NR¹³R¹⁴, OR¹⁸, S(O)_qR¹⁹ where q = 0, 1 or 2, or C(=O)R²⁰,

R⁸ is H, C₁₋₈-alkyl or aryl,

or

R^7 and R^8 together form Y, wherein Y is $\gamma' - CR^{21} = CR^{22} - CR^{23} = CR^{24} - \delta'$, where the end of Y identified by γ' is joined to the atom identified by γ in the compound corresponding to structure (II), and where the end of Y identified by δ' is joined to the atom identified by δ in the compound corresponding to structure (II);

R^9 is C_{1-8} -alkyl, C_{3-8} -cycloalkyl or $-CH_2-C_{3-8}$ -cycloalkyl, aryl or $-(C_{1-6}$ -alkyl)-aryl;

R^{10} is C_{1-8} -alkyl, C_{3-8} -cycloalkyl or $-CH_2-C_{3-8}$ -cycloalkyl, aryl or $-(C_{1-6}$ -alkyl)-aryl;

R^{11} is H, C_{1-8} -alkyl, C_{3-8} -cycloalkyl or $-CH_2-C_{3-8}$ -cycloalkyl, aryl or OR^{25} ;

R^{12} is C_{1-6} -alkyl or $-CH_2$ -aryl;

R^{13} and R^{14} are identical or different C_{1-6} -alkyl or together are $-(CH_2)_h-$ and form a ring where $h = 4$ or 5 ;

R^{18} is H, C_{1-8} -alkyl, C_{3-8} -cycloalkyl, $-CH_2-C_{3-8}$ -cycloalkyl, aryl or $-(C_{1-6}$ -alkyl)-aryl;

R^{19} is H, C_{1-8} -alkyl, C_{3-8} -cycloalkyl, $-CH_2-C_{3-8}$ -cycloalkyl, aryl or $-(C_{1-6}$ -alkyl)-aryl;

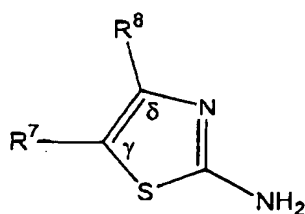
R^{20} is H, C_{1-8} -alkyl, C_{3-8} -cycloalkyl, $-CH_2-C_{3-8}$ -cycloalkyl, aryl or $-(C_{1-6}$ -alkyl)-aryl or OR^{27} ;

R^{21} , R^{22} , R^{23} and R^{24} are independently selected from the group consisting of H, fluorine, chlorine, bromine, iodine and OR^{28} ;

R^{25} , R^{26} , R^{27} and R^{28} are independently selected from the group consisting of H or C_{1-6} -alkyl, where R^{25} is not H when both R^1 is aryl and R^2 is alkyl;

comprising

reacting a thiazolamine corresponding to structure (VI),

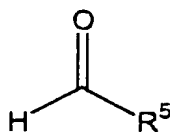


VI

wherein

R⁷ and R⁸ are as defined above in this claim, with the proviso that if R⁷ and R⁸ form Y, the end of Y identified by γ' is coupled to the atom of the thiazolamine of the general structure (VI) identified by γ and the end of Y identified by δ' is coupled to the atom of the thiazolamine of the general structure (VI) identified by δ,

in the presence of an acid, with an aldehyde corresponding to structure (IV)

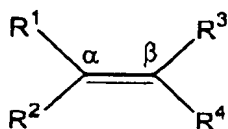


IV

wherein

R⁵ is as defined above in this claim,

and with an olefin corresponding to structure (V)

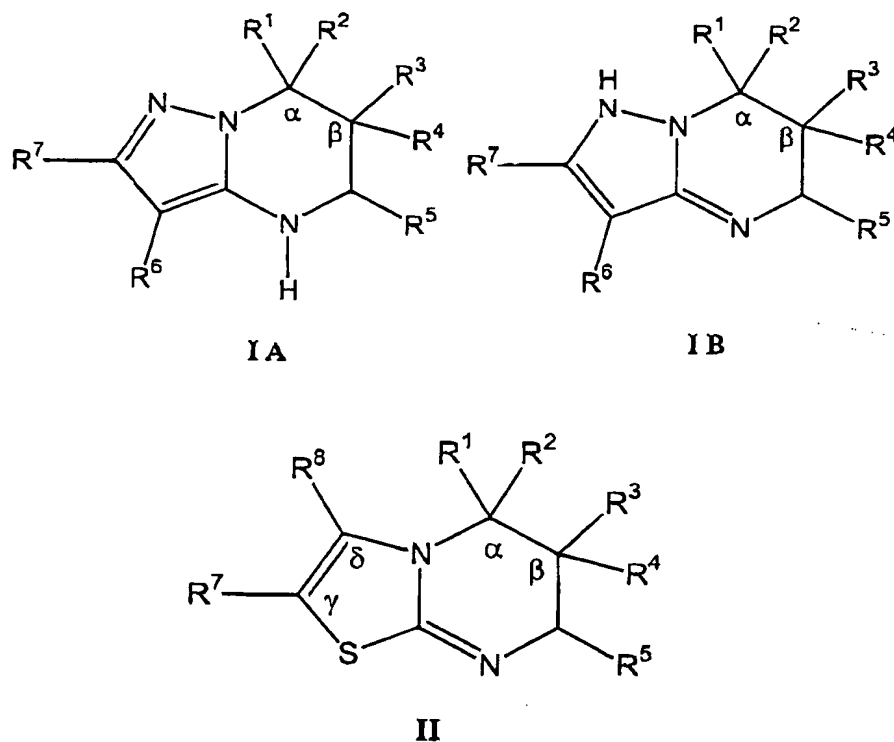


V

wherein

R^1 , R^2 , R^3 and R^4 are as defined above in this claim, with the proviso that if one of the radicals R^1 and R^2 together with one of the radicals R^3 and R^4 form W, the end of W identified by α' is joined to the α -carbon atom of the olefin corresponding to structure (V) and the end of W identified by β' is joined to the β -carbon atom of the olefin corresponding to structure (V).

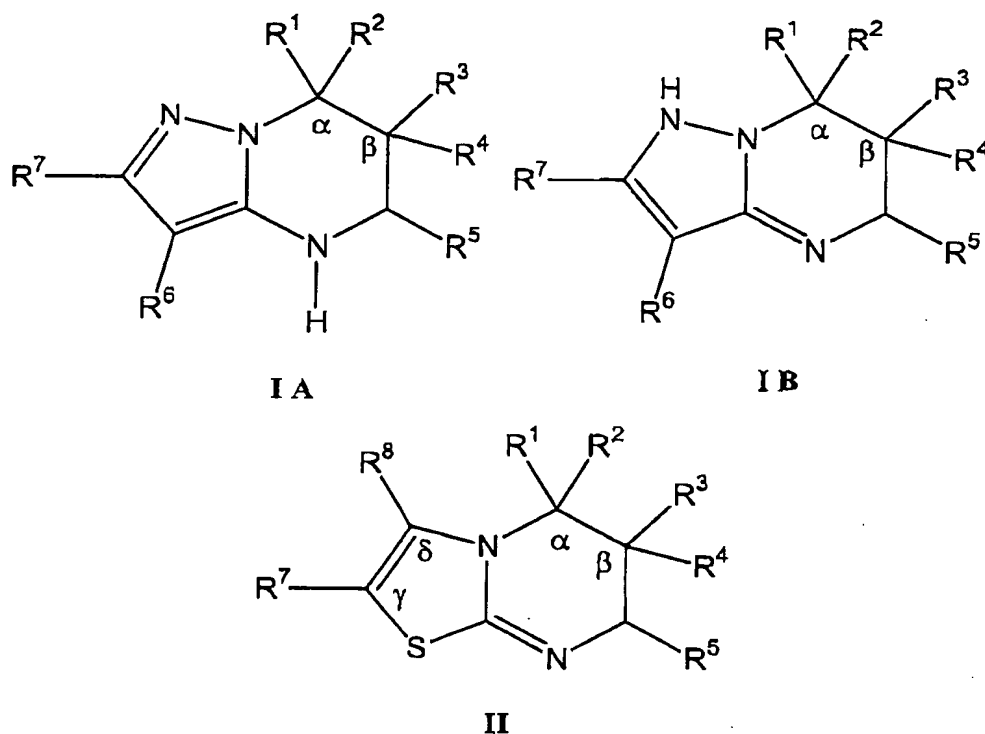
15. (original) A process according to claim 14, wherein the reaction of the heterocyclamine corresponding to structure (VI) with the aldehyde corresponding to structure (IV) and with the olefin corresponding to structure (V) is carried out in a one-pot process.
16. (original) A process according to claim 14, wherein the acid is trifluoroacetic acid.
17. (original) A process according to claim 14, wherein the reaction is carried out in an organic solvent at a temperature of 0° to 100°C and at a reaction time of 0.25 to 12 hours.
18. (original) A process according claim 14, wherein the reaction is carried out at a temperature of 15° to 40°C.
19. (currently amended) A substance ~~Substance~~ library containing at least one compound corresponding to structure (I A), (I B) or (II)



wherein

R¹, R², R³, R⁴, R⁵, R⁶, R⁷ and R⁸ are as defined in claim 1.

20. (currently amended) A pharmaceutical formulation comprising at least one compound corresponding to structure (I A), (I B) or (II)



or a salt thereof, ~~or a solvate or hydrate thereof~~, or a stereoisomer, mixture of stereoisomers having an arbitrary mixture ratio, or a racemate thereof;

wherein

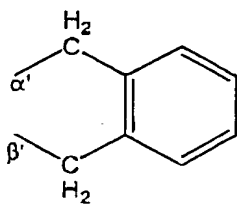
R^1 and R^2 are independently selected from the group consisting of H, $O-R^9$, $S-R^{10}$, C_{1-12} -alkyl, C_{3-8} -cycloalkyl, $-CH_2-C_{3-8}$ -cycloalkyl, aryl, $-(C_{1-6}$ -alkyl)-aryl, heterocyclyl or $-(C_{1-6}$ alkyl)-heterocyclyl,

wherein exactly one of the radicals R^1 and R^2 is H, or wherein one of the radicals R^1 and R^2 is aryl and the other radical of R^1 and R^2 is H or C_{1-12} -alkyl,

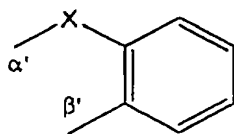
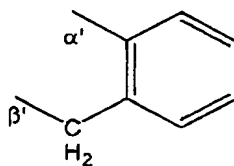
R^3 and R^4 are selected from the group consisting of H, C_{1-12} -alkyl, C_{3-8} -cycloalkyl, $-CH_2-C_{3-8}$ -cycloalkyl, aryl or $-(C_{1-6}$ -alkyl)-aryl, wherein at least one of the radicals R^3 and R^4 is H,

or

one of the radicals R^1 and R^2 together with one of the radicals R^3 and R^4 form W, where W is $\alpha'-(CH_2)_n-\beta'$ where $n = 3, 4, 5$ or 6 , $\alpha'-CH=CH-CH_2-\beta'$, $\alpha'-CH_2-CH=CH-\beta'$, $\alpha'-CH=CH-CH_2-CH_2-\beta'$, $\alpha'-CH_2-CH=CH-CH_2-\beta'$, $\alpha'-CH_2-CH_2-CH=CH-\beta'$, or $\alpha'-O-(CH_2)_m-\beta'$ where $m = 2, 3, 4$ or 5 , or where W corresponds to

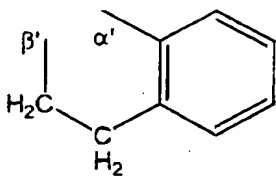


or

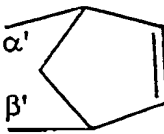


or

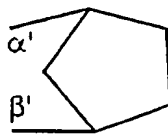
where $X = CH_2, O,$ or $S,$



or



or



or

where the end of W identified by α' is joined to the atom identified by α in the compound corresponding to structure (I A), (I B) or (II), the end of W identified by β' is joined to the atom identified by β in the compound corresponding to structure (I A), (I B) or (II), the other radical of R^1 and R^2 is H or C_{1-12} -alkyl, and the other radical of R^3 and R^4 is H or C_{1-12} -alkyl;

R^5 is C_{1-12} -alkyl, C_{3-8} -cycloalkyl, $-CH_2-C_{3-8}$ -cycloalkyl, aryl, $-(C_{1-6} \text{ alkyl})$ -aryl, heterocyclyl, $-(C_{1-6} \text{ alkyl})$ -heterocyclyl or $C(=O)R^{11}$;

R^6 is H, C_{1-8} -alkyl, $-CN$, fluorine, chlorine, bromine, iodine, NO_2 , NH_2 , NHR^{12} , $NR^{13}R^{14}$, OR^{15} , $S(O)_pR^{16}$ where $p = 0, 1$ or 2 , $-C(=O)R^{17}$ or $-N=N$ -aryl;

R^7 is H, C_{1-8} -alkyl, aryl, $-CN$, fluorine, chlorine, bromine, iodine, NO_2 , NH_2 , NHR^{12} , $NR^{13}R^{14}$, OR^{18} , $S(O)_qR^{19}$ where $q = 0, 1$ or 2 , or $C(=O)R^{20}$,

R^8 is H, C_{1-8} -alkyl or aryl,

or

R^7 and R^8 together form Y, wherein Y is $\gamma'-CR^{21}=CR^{22}-CR^{23}=CR^{24}-\delta'$, where the end of Y identified by γ' is joined to the atom identified by γ in the compound corresponding to structure (II), and where the end of Y identified by δ' is joined to the atom identified by δ in the compound corresponding to structure (II);

R^9 and R^{10} are independently selected from the group consisting of H, C_{1-8} -alkyl, C_{3-8} -cycloalkyl, $-CH_2-C_{3-8}$ -cycloalkyl, aryl and $-(C_{1-6}\text{-alkyl})$ -aryl;

R^{11} is H, C_{1-8} -alkyl, C_{3-8} -cycloalkyl, $-CH_2-C_{3-8}$ -cycloalkyl, aryl or OR^{25} ;

R^{12} is C_{1-6} -alkyl or $-CH_2$ -aryl;

R^{13} and R^{14} are identical or different C_{1-6} -alkyl radicals, or together are $-(CH_2)_h$ - and form a ring, where $h = 4$ or 5 ;

R^{15} and R^{16} are independently selected from the group consisting of H, C_{1-8} -alkyl, C_{3-8} -cycloalkyl, $-CH_2-C_{3-8}$ -cycloalkyl, aryl and $-(C_{1-6}\text{-alkyl})$ -aryl;

R^{17} is H, C_{1-8} -alkyl, C_{3-8} -cycloalkyl, $-CH_2-C_{3-8}$ -cycloalkyl, aryl, $-(C_{1-6}\text{-alkyl})$ -aryl, NH_2 , NHR^{12} , $NR^{13}R^{14}$ or OR^{26} ;

R^{18} and R^{19} are independently selected from the group consisting of H, C_{1-8} -alkyl, C_{3-8} -cycloalkyl, $-CH_2-C_{3-8}$ -cycloalkyl, aryl or $-(C_{1-6}\text{-alkyl})$ -aryl;

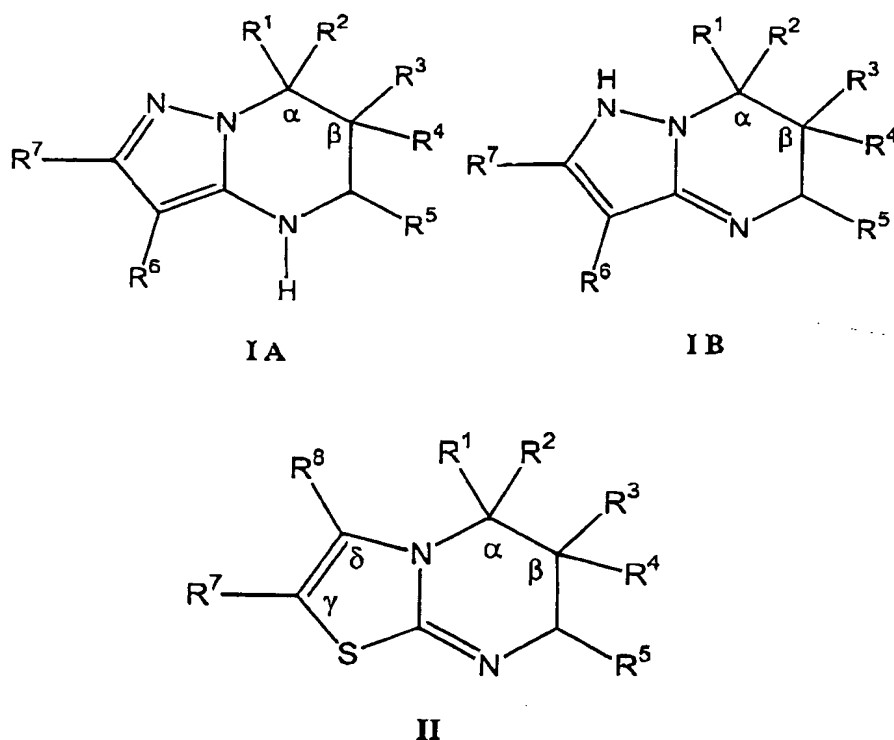
R^{20} is H, C_{1-8} -alkyl, C_{3-8} -cycloalkyl, $-CH_2-C_{3-8}$ -cycloalkyl, aryl or $-(C_{1-6}$ -alkyl)-aryl or OR^{27} ;

R^{21} , R^{22} , R^{23} and R^{24} are independently selected from the group consisting of H, fluorine, chlorine, bromine, iodine and OR^{28} ;

R^{25} , R^{26} , R^{27} and R^{28} are independently selected from the group consisting of H or C_{1-6} -alkyl, where R^{25} is not H when both R^1 is aryl and R^2 is alkyl;

and a pharmaceutically acceptable carrier.

21. (previously presented) A pharmaceutical formulation according to claim 20, wherein the compound corresponding to structure (I A), (I B) or (II) is present as a physiologically compatible salt.
22. (previously presented) A pharmaceutical formulation according to claim 20, wherein the compound corresponding to structure (I A), (I B) or (II) is present as a pure enantiomer or a pure diastereomer.
23. (previously presented) A pharmaceutical formulation according to claim 20, wherein the compound corresponding to structure (I A), (I B) or (II) is present as a mixture of enantiomers or a mixture of stereoisomers.
24. (currently amended) A method for treating pain comprising administering a pharmaceutically effective amount of a compound corresponding to structure (I A), (I B) or (II)



or a or salt thereof, ~~or a solvate or hydrate thereof~~, or a stereoisomer, mixture of stereoisomers having an arbitrary mixture ratio, or a racemate thereof;

wherein

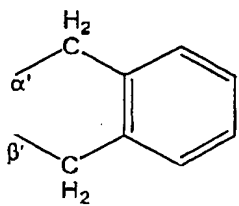
R^1 and R^2 are independently selected from the group consisting of H, $O-R^9$, $S-R^{10}$, C_{1-12} -alkyl, C_{3-8} -cycloalkyl, $-CH_2-C_{3-8}$ -cycloalkyl, aryl, $-(C_{1-6}$ -alkyl)-aryl, heterocyclyl or $-(C_{1-6}$ alkyl)-heterocyclyl,

wherein exactly one of the radicals R^1 and R^2 is H, or wherein one of the radicals R^1 and R^2 is aryl and the other radical of R^1 and R^2 is H or C_{1-12} -alkyl,

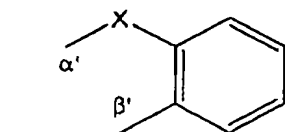
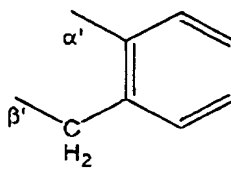
R^3 and R^4 are selected from the group consisting of H, C_{1-12} -alkyl, C_{3-8} -cycloalkyl, $-CH_2-C_{3-8}$ -cycloalkyl, aryl or $-(C_{1-6}$ -alkyl)-aryl, wherein at least one of the radicals R^3 and R^4 is H,

or

one of the radicals R^1 and R^2 together with one of the radicals R^3 and R^4 form W, where W is $\alpha'-(CH_2)_n-\beta'$ where $n = 3, 4, 5$ or 6 , $\alpha'-CH=CH-CH_2-\beta'$, $\alpha'-CH_2-CH=CH-\beta'$, $\alpha'-CH=CH-CH_2-CH_2-\beta'$, $\alpha'-CH_2-CH=CH-CH_2-\beta'$, $\alpha'-CH_2-CH_2-CH=CH-\beta'$, or $\alpha'-O-(CH_2)_m-\beta'$ where $m = 2, 3, 4$ or 5 , or where W corresponds to

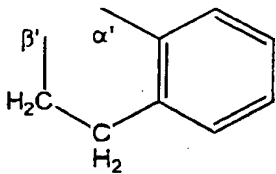


or



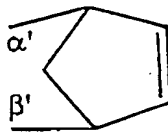
or

where $X = CH_2, O,$ or $S,$

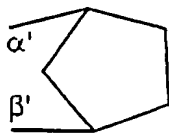


or

or



or



where the end of W identified by α' is joined to the atom identified by α in the compound corresponding to structure (I A), (I B) or (II), the end of W identified by β' is joined to the atom identified by β in the compound corresponding to structure (I A), (I B) or (II), the other radical of R^1 and R^2 is H or C_{1-12} -alkyl, and the other radical of R^3 and R^4 is H or C_{1-12} -alkyl;

R^5 is C_{1-12} -alkyl, C_{3-8} -cycloalkyl, $-CH_2-C_{3-8}$ -cycloalkyl, aryl, $-(C_{1-6} \text{ alkyl})$ -aryl, heterocyclyl, $-(C_{1-6} \text{ alkyl})$ -heterocyclyl or $C(=O)R^{11}$;

R^6 is H, C_{1-8} -alkyl, $-CN$, fluorine, chlorine, bromine, iodine, NO_2 , NH_2 , NHR^{12} , $NR^{13}R^{14}$, OR^{15} , $S(O)_pR^{16}$ where $p = 0, 1$ or 2 , $-C(=O)R^{17}$ or $-N=N$ -aryl;

R^7 is H, C_{1-8} -alkyl, aryl, $-CN$, fluorine, chlorine, bromine, iodine, NO_2 , NH_2 , NHR^{12} , $NR^{13}R^{14}$, OR^{18} , $S(O)_qR^{19}$ where $q = 0, 1$ or 2 , or $C(=O)R^{20}$,

R^8 is H, C_{1-8} -alkyl or aryl,

or

R^7 and R^8 together form Y, wherein Y is $\gamma' - CR^{21} = CR^{22} - CR^{23} = CR^{24} - \delta'$, where the end of Y identified by γ' is joined to the atom identified by γ in the compound corresponding to structure (II), and where the end of Y identified by δ' is joined to the atom identified by δ in the compound corresponding to structure (II);

R^9 and R^{10} are independently selected from the group consisting of H, C_{1-8} -alkyl, C_{3-8} -cycloalkyl, $-CH_2-C_{3-8}$ -cycloalkyl, aryl and $-(C_{1-6} \text{ alkyl})$ -aryl;

R^{11} is H, C_{1-8} -alkyl, C_{3-8} -cycloalkyl, $-CH_2-C_{3-8}$ -cycloalkyl, aryl or OR^{25} ;

R^{12} is C_{1-6} -alkyl or $-CH_2$ -aryl;

R^{13} and R^{14} are identical or different C_{1-6} -alkyl radicals, or together are $-(CH_2)_h$ - and form a ring, where $h = 4$ or 5 ;

R^{15} and R^{16} are independently selected from the group consisting of H, C_{1-8} -alkyl, C_{3-8} -cycloalkyl, $-CH_2-C_{3-8}$ -cycloalkyl, aryl or $-(C_{1-6} \text{ alkyl})$ -aryl;

R^{17} is H, C_{1-8} -alkyl, C_{3-8} -cycloalkyl, $-CH_2-C_{3-8}$ -cycloalkyl, aryl, $-(C_{1-6} \text{ alkyl})$ -aryl, NH_2 , NHR^{12} , $NR^{13}R^{14}$ or OR^{26} ;

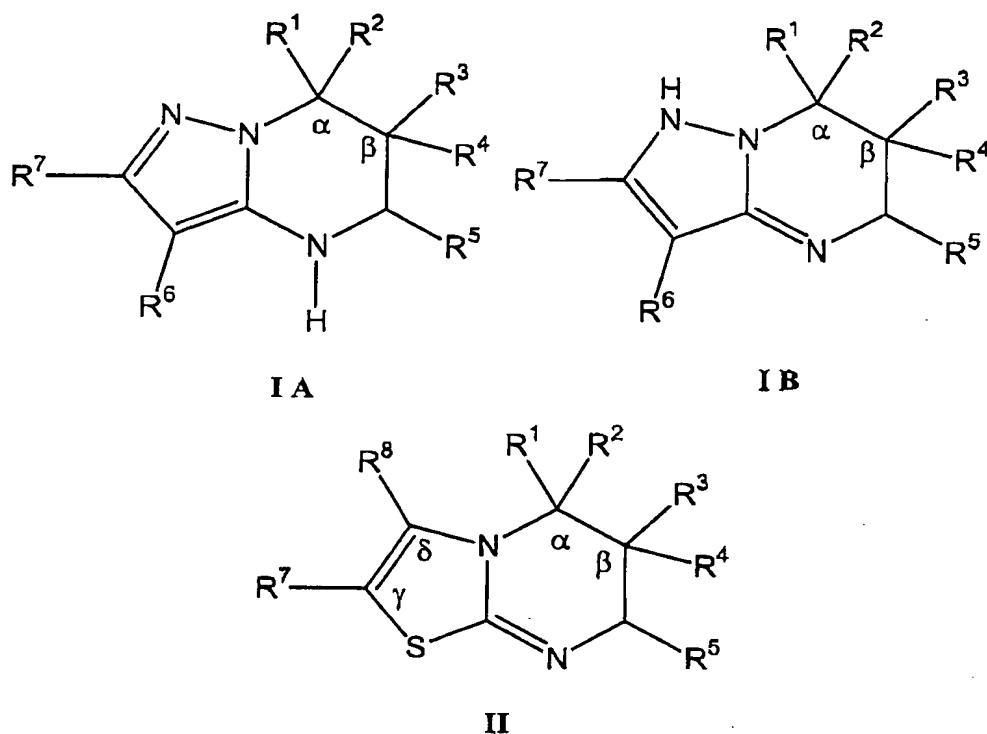
R^{18} and R^{19} are independently selected from the group consisting of H, C_{1-8} -alkyl, C_{3-8} -cycloalkyl, $-CH_2-C_{3-8}$ -cycloalkyl, aryl and $-(C_{1-6} \text{ alkyl})$ -aryl;

R^{20} is H, C_{1-8} -alkyl, C_{3-8} -cycloalkyl, $-CH_2-C_{3-8}$ -cycloalkyl, aryl or $-(C_{1-6}$ -alkyl)-aryl or OR^{27} ;

R^{21} , R^{22} , R^{23} and R^{24} are independently selected from the group consisting of H, fluorine, chlorine, bromine, iodine and OR^{28} ;

R^{25} , R^{26} , R^{27} and R^{28} are independently selected from the group consisting of H or C_{1-6} -alkyl, where R^{25} is not H when both R^1 is aryl and R^2 is alkyl.

25. (original) A method according to claim 24, wherein the compound corresponding to structure (I A), (I B) or (II) is present as a physiologically compatible salt.
26. (original) A method according to claim 24, wherein the compound corresponding to structure (I A), (I B) or (II) is present as a pure enantiomer or a pure diastereomer.
27. (original) A method according to claim 24, wherein the compound corresponding to structure (I A), (I B) or (II) is present as a mixture of enantiomers or a mixture of stereoisomers.
28. (currently amended) A method for treatment of ~~epilepsy, schizophrenia, neurodegenerative conditions,~~ Alzheimer's disease, ~~Huntington's disease and Parkinson's disease, cerebral ischaemias, infarcts, psychoses due to raised amino acid levels, cerebral oedemas, insufficiency states of the central nervous system, hypoxias, anoxias, AIDS dementia, encephalomyelitis, Tourette's syndrome, perinatal asphyxia, or tinnitus~~ comprising administering a pharmaceutically effective amount of a compound corresponding to structure (I A), (I B) or (II),

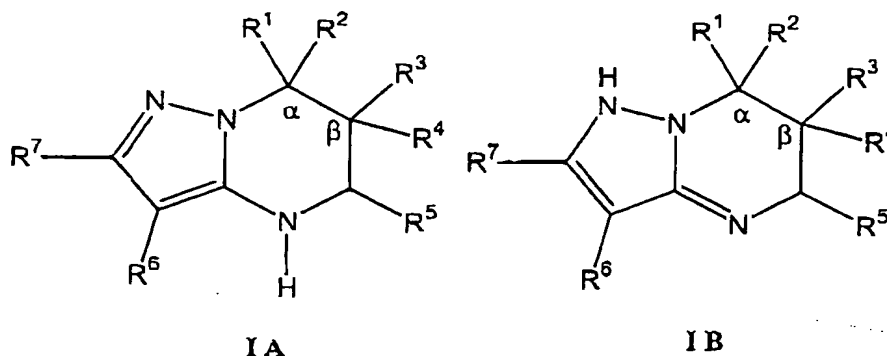


or a salt thereof, ~~or a solvate or hydrate thereof~~, or a stereoisomer, mixture of stereoisomers having an arbitrary mixture ratio, or a racemate thereof;

wherein R¹, R², R³, R⁴, R⁵, R⁶, R⁷ and R⁸ are as defined in claim 20.

29. (original) A method according to claim 28, wherein the compound corresponding to structure (I A), (I B) or (II) is present as a physiologically compatible salt.
30. (original) A method according to claim 28, wherein the compound corresponding to structure (I A), (I B) or (II) is present as a pure enantiomer or a pure diastereomer.
31. (original) A method according to claim 28, wherein the compound corresponding to structure (I A), (I B) or (II) is present as a mixture of enantiomers or a mixture of stereoisomers.

32. (currently amended) A method of ligand-binding a nucleoside transport protein, adenosine kinase, adenosine deaminase, or A₁, A₂, or A₃ receptors comprising providing a compound corresponding to formula (I A) or (I B)



or a salt thereof, ~~or a solvate or hydrate thereof~~, or a stereoisomer, mixture of stereoisomers having an arbitrary mixture ratio, or a racemate thereof;

wherein

R¹ and R² are independently selected from the group consisting of H, O-R⁹, S-R¹⁰, C₁₋₁₂-alkyl, C₃₋₈-cycloalkyl, -CH₂-C₃₋₈-cycloalkyl, aryl, -(C₁₋₆-alkyl)-aryl, heterocyclyl or -(C₁₋₆ alkyl)-heterocyclyl,

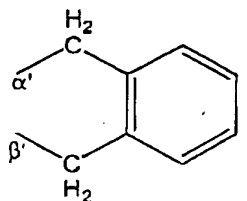
wherein exactly one of the radicals R¹ and R² is H, or wherein one of the radicals R¹ and R² is aryl and the other radical of R¹ and R² is H or C₁₋₁₂-alkyl,

R³ and R⁴ are selected from the group consisting of H, C₁₋₁₂-alkyl, C₃₋₈-cycloalkyl, -CH₂-C₃₋₈-cycloalkyl, aryl or -(C₁₋₆-alkyl)-aryl, wherein at least one of the radicals R³ and R⁴ is H,

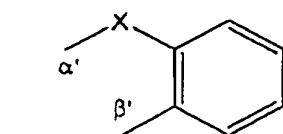
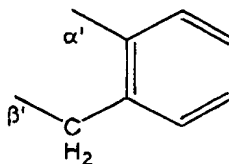
or

one of the radicals R¹ and R² together with one of the radicals R³ and R⁴ form W, where W is α'-(CH₂)_n-β' where n = 3, 4, 5 or 6, α'-CH=CH-CH₂-β', α'-CH₂-CH=CH-β', α'-CH=CH-CH₂-CH₂-β', α'-CH₂-CH=CH-CH₂-β', α'-CH₂-CH₂-

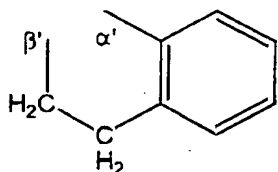
$\text{CH}=\text{CH}-\beta'$, or $\alpha'-\text{O}-(\text{CH}_2)_m-\beta'$ where $m = 2, 3, 4$ or 5 , or where W corresponds to



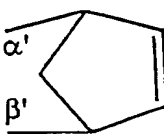
or



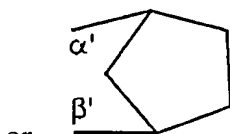
or ' where $X = \text{CH}_2, \text{O},$ or $\text{S},$



or



or



or

where the end of W identified by α' is joined to the atom identified by α in the compound corresponding to structure (I A) or (I B), the end of W identified by β' is joined to the atom identified by β in the compound corresponding to structure (I A) or (I B), the other radical of R^1 and R^2 is H or C_{1-12} -alkyl, and the other radical of R^3 and R^4 is H or C_{1-12} -alkyl;

R^5 is C_{1-12} -alkyl, C_{3-8} -cycloalkyl, $-\text{CH}_2-\text{C}_{3-8}$ -cycloalkyl, aryl, $-(\text{C}_{1-6} \text{ alkyl})$ -aryl, heterocyclyl, $-(\text{C}_{1-6} \text{ alkyl})$ -heterocyclyl or $\text{C}(=\text{O})\text{R}^{11}$;

R^6 is H , C_{1-8} -alkyl, $-\text{CN}$, fluorine, chlorine, bromine, iodine, NO_2 , NH_2 , NHR^{12} , $\text{NR}^{13}\text{R}^{14}$, OR^{15} , $\text{S}(\text{O})_p\text{R}^{16}$ where $p = 0, 1$ or 2 , $-\text{C}(=\text{O})\text{R}^{17}$ or $-\text{N}=\text{N}$ -aryl;

R^7 is H, C_{1-8} -alkyl, aryl, -CN, fluorine, chlorine, bromine, iodine, NO_2 , NH_2 , NHR^{12} , $NR^{13}R^{14}$, OR^{18} , $S(O)_qR^{19}$ where $q = 0, 1$ or 2 , or $C(=O)R^{20}$,

R^9 and R^{10} are independently selected from the group consisting of H, C_{1-8} -alkyl, C_{3-8} -cycloalkyl, $-CH_2-C_{3-8}$ -cycloalkyl, aryl and $-(C_{1-6}$ -alkyl)-aryl;

R^{11} is H, C_{1-8} -alkyl, C_{3-8} -cycloalkyl, $-CH_2-C_{3-8}$ -cycloalkyl, aryl or OR^{25} ;

R^{12} is C_{1-6} -alkyl or $-CH_2$ -aryl;

R^{13} and R^{14} are identical or different C_{1-6} -alkyl radicals, or together are $-(CH_2)_h-$ and form a ring, where $h = 4$ or 5 ;

R^{15} and R^{16} are independently selected from the group consisting of H, C_{1-8} -alkyl, C_{3-8} -cycloalkyl, $-CH_2-C_{3-8}$ -cycloalkyl, aryl or $-(C_{1-6}$ -alkyl)-aryl;

R^{17} is H, C_{1-8} -alkyl, C_{3-8} -cycloalkyl, $-CH_2-C_{3-8}$ -cycloalkyl, aryl, $-(C_{1-6}$ -alkyl)-aryl, NH_2 , NHR^{12} , $NR^{13}R^{14}$ or OR^{26} ;

R^{18} and R^{19} are independently selected from the group consisting of H, C_{1-8} -alkyl, C_{3-8} -cycloalkyl, $-CH_2-C_{3-8}$ -cycloalkyl, aryl and $-(C_{1-6}$ -alkyl)-aryl;

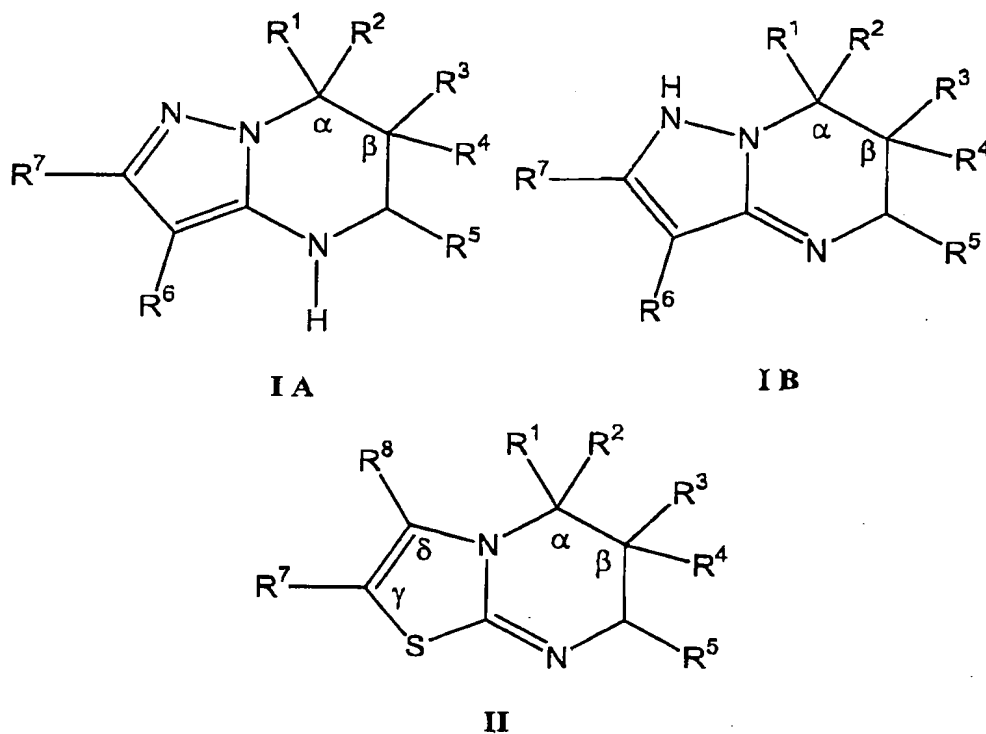
R^{20} is H, C_{1-8} -alkyl, C_{3-8} -cycloalkyl, $-CH_2-C_{3-8}$ -cycloalkyl, aryl or $-(C_{1-6}$ -alkyl)-aryl or OR^{27} ;

R^{25} , R^{26} and R^{27} are independently selected from the group consisting of H or C_{1-6} -alkyl, where R^{25} is not H when both R^1 is aryl and R^2 is alkyl;

in the presence of a nucleoside transport protein, adenosine kinase, adenosine deaminase, or A_1 , A_2 , or A_3 receptors.

33. (original) A method according to claim 32, wherein the compound corresponding to structure (I A) or (I B) is present as a physiologically compatible salt.

34. (original) A method according to claim 32, wherein the compound corresponding to structure (I A) or (I B) is present as a pure enantiomer or a pure diastereomer.
35. (original) A method according to claim 32, wherein the compound corresponding to structure (I A) or (I B) is present as a mixture of enantiomers or a mixture of stereoisomers.
- 36-39. (cancelled)
40. (currently amended) A method for treating pain, ~~neuropathic pain, respiratory pathway conditions, cancer, cardiac arrhythmias, ischaemias, epilepsy, Huntington's disease, malfunctions and diseases of the immune system, inflammatory conditions and diseases, neonatal hypoxia, neurodegenerative conditions, Parkinson's disease, kidney failure, schizophrenia, sleep disturbances, strokes, thromboses, urinary incontinence, diabetes, psoriasis, septic shock, cerebral trauma, glaucoma or congestive insufficiency~~ comprising administering a pharmaceutically effective amount of a pharmaceutical formulation ~~medicament~~ according to claim 20.
41. (cancelled)
42. (currently amended) A pharmaceutical composition comprising at least one compound corresponding to structure (I A), (I B) or (II) of claim 1



or a salt thereof, ~~or a solvate or hydrate thereof~~, or a stereoisomer, mixture of stereoisomers having an arbitrary mixture ratio, or a racemate thereof;

wherein R¹, R², R³, R⁴, R⁵, R⁶, R⁷ and R⁸ are as defined in claim 1;

and at least one pharmaceutical auxiliary substance.